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AN

THE PRECIOUS STONES;

WITH A HISTORY,

AND DESCRIPTION FROM MODELS,

OF THE LARGEST INDIVIDUAL DIAMONDS KNOWN;

INCULPING, PARTICULARLY, A CONSIDERATION

OF THE ROUENNOIS CLAIM

TO NOFGOITY.

BY

HIPPONAX ROSET.

JOHN PENINGTON & SON.

NO 41, SOUTH SIXTH STREET.

PHILADELPHIA.

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P R E F A C E.

The matter of the following pages appeared originally, divided into half a dozen Chapters, in Numbers 18, 19, 20, 21, 22, and 23 of BIZARRE, Volume VI, Year 1855. Although the subject is by no means fully discussed, the scope the author has allowed himself is believed to be comprehensive enough for the patience of the general reader. And a combination of these Chapters into one, it has been suggested, would form a pamphlet of sufficient interest to warrant its publication. In doing this, a more methodical arrangement of the subject, than that originally pursued, has been adopted; considerable additional matter has been introduced; and many former errors of the press corrected.

H. R..

PHILADELPHIA, December 1, 1855.

JEWELRY

AND

THE PRECIOUS STONES.

To one, who contemplates it, there is much that is of the poetic and attractive about the vocation of the Jeweler. In the first place, the materials he chiefly deals with are the rarest of earth's mineral products, the master-pieces of the "mighty mother," Nature, in this department of her labors. Gold and silver and the precious stones have in all ages exercised an important influence over the hopes and wishes, the thoughts and imaginations of men in all stages of development, and these are the principal subjects of the Jeweler's handiwork.

For a description of the potency of gold, Shakspeare, as might have been supposed, transcends all others.

"This yellow slave

Will knit and break religions; bless the accursed;
Make the hoar leprosy adored; place thieves,
And give them title, knee and approbation!
O thou sweet king-killer, and dear divorce
Twixt natural son and sire! thou bright defiler
Of Hymen's purest bed! thou valiant Mars!
Thou ever young, fresh, loved and delicate woorer,
Whose blush doth thaw the consecrated snow
That lies on Dian's lap! thou visible god,
That solder'st close impossibilities
And mak'st them kiss! that speak'st with every tongue,
To every purpose!"

And this same metal is matter of the Jeweler's daily handling.

And then the associations connected with the products of his Art are such as appeal, in numerous respects, most forcibly to the imagination. Kings and queens, peers and peeresses; beauty, elegance, grace and refinement; coronation seasons; triumphal occasions in all their variety; the ball and the festival; all these persons, scenes and things have a natural relation to the Jeweler's profession, and derive no small share of their brilliancy and charm from the beautiful and costly specimens of his skill.

The Jeweler's profession, too, belongs to the sphere of the artistic-beautiful, and is undeniably entitled to rank as one of the Fine Arts. Such, indeed, in ancient days, it was in the most absolute sense. The ana-

tomic and general scientific knowledge, and the manipulative skill coupled with the creative genius, which went to the shaping of the immortal works of Phidias in marble and Apelles on canvass, were not less devoted to the intaglios and alto-relievos of the gem-engravers Agathopus, Polygnotus, Apollonides, Lycos and their compeers successively in the Periclean, Alexandrian and Augustan ages.

Still further. The precious stones have in all ages been signalized by myriad forms of imaginative, poetic superstition. These may in part have sprung from the several important uses made by monarchs of their engraved signet-rings. Pharaoh, we read, in conferring upon Joseph the vice-regal office, entrusted him with his own signet-ring. Antiochus Epiphanes gave his minister Philip his ring, as a token of the latter's authority to elect a successor to the throne. Alexander the Great, while dying, transferred his signet to his general Perdiccas, and thus made him his successor. Darius and his nobles set their seals to the lions' den, into which Daniel was cast, as a security against the prophet's being removed therefrom without their permission. Judah gave his signet-ring to Tamar, as a pledge of his faith. In short, we find that, among the Egyptians and Hebrews, the Phoenicians and Greeks, the Etruscans, the Romans and the Northern nations generally, the engraved ring was employed as a token to impart authority and security besides being the most valued of all ornaments.

It was doubtless from these circumstances, in part at least, that the precious gems became invested with so many superstitious associations. Many among them have always been and are to this day cherished by the Orientals as amulets possessing numerous mystic virtues both negative and positive—shielding their owners from peril and adversity, and securing to them prosperous fortunes. All over the East the signet of Solomon has been embalmed in numberless fables, as gifted with a miraculous power to command and control the devas, genii and

other demonic inhabitants of the invisible spheres.

There is no extant history to our knowledge of the Jeweler's vocation. Apelles, the celebrated Grecian painter, wrote a history of Art, which has unfortunately perished. There can be little doubt that this contained in a consecutive form the information we might desire on this subject. As it is, we must glean what information we may from scattered notices in general history.

From all we can gather, it would seem that the Jeweler's vocation originally was not a distinct one, but was merged in the general profession of the Artist—a profession sometimes uniting sculpture, engraving, &c.. It is most probable that gem-engraving originated, like numerous other Arts, among the Egyptians. Diodorus Siculus, it is true, affirms that the Ethiopians preceded the Egyptians in this Art, but he furnishes no authentic evidence of this. Vague tradition, indeed, intimates that, at a date so early as to be immemorial, there existed in central Africa a nation, entitled the Ethiopians, who had reached a very high pitch of culture and refinement, besides being distinguished for eminent moral worth. Thus Homer, in one of his Epics, speaks of Jove and the other Olympians having gone on their annual visit to the "blameless Ethiopians." It might be, on the testimony of this hoary tradition, that Diodorus attributes the invention of gem-engraving to the Ethiopians. Authentic history, however, assigns it to Egypt.

The first Egyptian specimens of this Art were hieroglyphic symbols of their deities on shells and agate stones. These shells and stones were doubtless worn earliest as amulets, though afterwards as ornaments. The use of these ornamental symbols of the divinities speedily became so extensive, as to stimulate to improvements in the Art, as also to the employment of materials more valuable than shell and agate. This Art seems to have attained its zenith among the Egyptians under the great conqueror, Sesostris, 1,000 years B. C., and 150 years after the supposed date of the siege of Troy.

So far as we can gather, Egypt was the single source from which the knowledge of this Art, as well as of others, spread into the other ancient nations made known to us by history. Moses and his people doubtless carried it thence into Palestine, for we find notices of it in the earliest Hebrew records.

The Phœnicians were eminent especially as diesinkers, but also celebrated for their cameos and engraved gems generally. Their knowledge was probably derived from the banks of the Nile, though some have pronounced them original Artists, on what authority we know not.

The Arts generally, this inclusive, are said to have been carried into Greece from Egypt 1,300 years B. C., and 150 years after Moses' death. If introduced thus early, it is singular that Homer, in his account of the Trojan war, which is placed by tradition 150 years later, should not have mentioned engraved gems, while he does mention chasing on metal of the highest artistic perfection, as in the description of Achilles' shield, &c., &c.. Yet the eminent sculptor Polygnotus places an engraved ring on the finger of his statue of Ulysses, intimating his opinion, that the Art was known in Ulysses' day. Some of the earliest known Greek engravings on gems were those of Egyptian scarabæi and deities,—a clear evidence of the origin of their Art. During the interval of 800 years from Daedalus to Pericles the Arts generally, this among the number, steadily advanced. To this era belong the distinguished names of Heius, Scylax, Admon and others. The age of Pericles and that immediately following were the topmost period of Greek Art. Phidias and Praxiteles, Apelles, Zeuxis, Parrhasius and Polygnotus, Aspasia, Mycon, Pamphylius and Plotarchus may be named, as among the artist-immortals of this era. Which of these combined gem-engraving with their other artistic performances we are unable to say. We are assured, however, that in gem-engraving were then found united all the excellencies of sculpture and painting.

During the century intervening between Pericles and Macedonian Alexander the Arts most probably declined little, if at all, in excellence. We find, engraved on gems of Alexander's time, as the names of their artists, Agathomerus, Axeochus and Agathopus. History records, too, as artists of the same era, some of them doubtless gem-engravers, Pyrgoletes, Action, Apollonides, Solon, Sostratus, Cronius, &c..

The Etruscans, the aborigines of Italy, having borrowed from Egypt the rudiments of the Arts, cultivated them with considerable success. Their existence, as a separate people, however, was historically brief, and finally became merged in the universally dominant life of Rome.

For the first seven or eight centuries of their existence, the Romans seem to have devoted little attention to the culture of Art. Wars of conquest and agriculture were their favorite and almost sole pursuits. As their conquests, however, gradually extended over countries distinguished for artistic cultivation, the spoils conveyed to Rome by victorious generals by degrees created a taste for the products of Art. We read that Pompey made a fine collection of these from the spoils of the celebrated Mithridates of Pontus; that Julius Cæsar presented the

city with a collection of gems engraved at his own expense; that Marcus Seaurus had a museum of this kind, as had also Marcellus, that son of Octavia, whose early death is so pathetically commemorated by Virgil in his *Aeneid*. We learn also that intaglio portraits were common at this era. The eminence attained in the Jeweler's Art by these people is fully established, not upon the strength of the history and writings of the period, but by the superb specimens actually extant in all the great museums of the European continent, which specimens have been exhumed at various periods from Etruscan graves, from Herculaneum, Pompeii, and numerous other localities in Italy. The British Museum some time since became by purchase the repository of many treasures of this description which had been collected by the Prince of Canino. Among them are several necklaces of gold, some wrought into wreaths of ivy leaves, others consisting of circles, lozenges, rosettes, hippocampi, pendant hearts, &c.. The necklace proper, adorned with drops or pendants, which, when worn, fell round the neck like rays diverging from the centre, was always a favorite ornament among the women of antiquity. The necklace has been in nearly all ages and countries worn too as a decoration or mark of distinction by men, and still exists as their most precious badge among the extremes of the race—the refined Orders of Knighthood and the Savage Families of Indian chiefs—and by the word Indian we imply the whole race of uncivilized Man.

Of course the progress of the Arts in Rome must have been greatly accelerated by the reduction of Greece, their preëminently favored seat, to a Roman province about a century and a half before Christ, and the large migration of Greek Artists, which would naturally then follow to the metropolis of the world. In fact Rome's most celebrated artists were rarely of other than Greek extraction, the Romans being ever worshippers rather of strength than of beauty. This will appear in most of the following names,—those of distinguished artists of the era of Augustus, Rome's so-called "golden age," viz. Epitynchamus, Felix, Aepolianus, Evodus, Lycos, Carpos, &c..

The Arts continued to flourish in Rome till the reign of Septimius Severus about A. D., 200. By this period the empire had become so disordered, as to exhibit symptoms of rapid decline, and the Arts naturally shared in its fate. The removal of the Emperor Constantine to Byzantium and the constituting of this the metropolis of the empire about A. D., 300, transferred most of the remaining artistic culture to this city. It was the reflux of the bright stream to its fountain-head. At Rome the barbarian ir-

ruptions, at the latter part of the fourth and the opening of the fifth centuries, buried in dense night whatever yet remained of the light of Art. At Constantinople they survived some centuries longer, though dwindling under the disorders of the Eastern empire, till this empire was subverted, A. D., 1,453, by the Turkish Sultan, Mahomet II. The Greek artists fled from this barbarian dominion, and found refuge in Italy. They were favorably received and patronized by the Popes, then in the zenith of both temporal and spiritual power, and by the citizens of those Italian Republics, which so brilliantly illustrated the darkness of mediæval times. The Medici of Florence were especially distinguished for their munificent encouragement alike of Classic learning and of Art, and Lorenzo bestowed a more than ordinary patronage upon the Art of gem-engraving. His brother Giovanni was himself the most eminent gem-engraver of his age.

We are now brought to the period in which the Jeweler's Art reached its culminating point in the artistic performances of Benvenuto Cellini. He was born at Florence in 1500, and was the son of an ivory-cutter. He apprenticed himself at an early age to a goldsmith, and soon rivalled the best workmen in designing, carving, engraving, chasing, damaskening steel, &c.. His skill became so well known that he was employed by the Pope, Clement VII., to make the stamps for the Roman mint; and the coins struck from them remain unrivalled to this day. After the death of Clement his talents were kept employed by the Grand Dukes of Tuscany, and by Francis I of France. The statues and statuettes in marble and metals, the medals, the works of jewelry, the elaborately chased vases and dishes, executed for these sovereigns by this great JEWELER, are incredibly numerous, and the chief of them still exist in the great European receptacles of Art, where they have been carefully preserved, and have challenged the skill of the first artists of every subsequent age. But the extent of the subject we have assigned to ourselves forbids us to linger any longer upon this interesting man—for, a correct, full and just description of certain single specimens of his celebrated chased vases, or pieces of plate, would of itself cover scarcely less ground than does our entire article. Before finally dismissing him however we will recommend to the reader's notice his autobiography, a translation of which, under the title of "Memoirs of Benvenuto Cellini," (2 vols, 8vo.) was published in 1822, under the supervision of Thomas Roscoe. This is one of the most entertaining and peculiar pieces of composition extant, and such a course of extravagant self-laudation does our

hero pursue, throughout his book, that the reader would be strongly inclined to suspect him of being but a quack after all, if, fortunately for his reputation, the embodiments of the great conceptions of his genius did not still exist in all their pristine perfection.

We have thus traced the history of Art down to the period when the Reformation, the discovery of America, the invention of printing, &c., &c., gave a new and unprecedented and universal impulse to all branches of culture and all departments of human improvement. Under this impulse all the nations of Christendom have been rapidly and incessantly advancing, and their progress at this moment is, perhaps, more rapid than ever before. With the lapse of time and the division of labor, which has so widely taken place in all trades and professions, the Jeweler's vocation has gradually become separated from that of the general Artist, and its professors now limit their performances chiefly to the more valuable metals, gold and silver, and the precious stones.

Although, as we have said, no individual performances have since surpassed those of Cellini, still since then the most extraordinary improvements have taken place in the Jeweler's Art—in his day the commissions of the European monarchs sufficed to monopolize all the talent of the epoch—in ours, thanks to steam and other ingenious mechanical inventions of late periods the elementary branches of labor in this Art have been so abridged, thus reducing upon any single piece of work the expenditure of effort of the finishing Artist, and enlarging prodigiously the general field of workmanship, that the talent now at the world's command suffices for the full accomplishment of the endless commissions of that now really vast population throughout the globe, the wealthy classes. Paris and London in the Eastern hemisphere, and New York in the Western, are the principal seats of culture of this Art at the present time. Had we in detail the materials we would connect herewith some description of the great establishments of the former cities which supply their continent with the magnificent jewelry in such general demand at this day among people of wealth. However unprepared we are for that task, we are not, as it happens, able to plead a want of information concerning the great focus of the Art of the Jeweler on this side of the Atlantic—we mean the *Atelier* of *TIFFANY* in New York. After a full discussion then of the main branches of our subject, we will, unless it would be prolonging our article unreasonably for the pages of so slight a journal as *BIZARRE*, revert to this point and give our readers some account of this vast laboratory—not only because we consider that it comes really within the scope of our subject

and that we possess the materials therefor, but because we believe we could make it very interesting, and, still further, for a special reason that we will give, if we resume the consideration of the matter that has suggested itself here.

Having traced the history of the Jeweler's Art to the present day it seems proper now, that we should speak of the materials with which the Jeweler is chiefly engaged. Of gold and silver it were superfluous speaking, since whatever is known at all concerning these metals, and the regions producing them, is sufficiently familiar to all readers. Of the Precious Stones we may then speak, and this we will do in their respective order of hardness, which the lapidary divides into ten principal grades. 1. The Diamond. 2. The Sapphire, the Ruby. 3. The Topaz, the Emerald, the Amethyst. 4. The Carnelian, the Carbuncle, the Garnet, the Onyx, the Sardonyx, the Heliotrope, the Chrysolite, the Hyacinth, the Cat's-eye. 5. The Opal. 6. The Pearl. 7. The Turquoise. Under the 8th, 9th, and 10th grades are classed substances not falling under the denomination of Precious Stones, such as Amber, Coral, Lava, Ivory, etc.. The substances given under each of these grades will scratch all those substances classified under subsequent grades, and the ancients engraved them all save the Diamond, and the art of engraving that was discovered by Ambrosius Caradossa, A. D., 1500. We will now proceed with the consideration of the Diamond, the first in the above order.

The Diamond, by unanimous consent, is placed at the head of all gems, and this rank it has always held. It was named by the Greeks, "adamant," from two words signifying "unconquerable." This title was given it from its hardness, it being then supposed indestructible in its atoms, though it might be reduced to atoms by the hammer, or otherwise. But the magical electric current reduced this hardest of substances to mere gaseous products—though it had before that been somewhat volatilized in the focus of the great lens of Cosmo III, Grand Duke of Tuscany, in the middle of the seventeenth century. The degree of temperature required for its combustion is 5,000 degrees, Fahrenheit. It is just three and a half times as heavy as an equal bulk of water. Its refractive power exceeds that of any other body, and thus endows it with its extraordinary brilliancy. It seems however to incorporate light within itself, or to be phosphorescent, as it will at times emit rays of light of its own in total darkness. This light is oftener observed upon rubbing the stone with the finger, or with any silk, woolen, or fur substance. It is a non-conductor of electricity, and is not acted upon by any solvent.

The Diamond has never been found in rocks, as are all other minerals, but only in gravel and mud conglomerations in beds of rivers, in deep ravines on the slopes of mountains, and in cavities and water courses on the summits of, sometimes, the loftiest elevations; and hence it is believed to be the product of vegetable secretion. This supposition is confirmed by the results of the experiments upon it, which seem to demonstrate it to be pure crystallized carbon. The primitive form of the Diamond is the regular octohedron, or two four sided pyramids, whose sides are equilateral triangles, placed base to base. Diamonds are generally found nearly colorless and those that are entirely so are most esteemed. They have been found however rose-colored, yellow, blue, green, red, gray, brown, and even black. But the latter are extremely rare. When colored, it is by the presence of some adventitious substance, as by the oxides of iron, manganese, nickel, chromium, etc.. Those Diamonds, which are only tinged with the various colors, are of less value than those colored deeply.

The modes of testing the Diamond are various. The most convenient are, submitting them to a white heat, and rubbing them with a pointed Saphire. They will undergo the former test without melting and the latter without being scratched; and the Saphire is the second in the order of hardness as we have above stated, and will scratch every other substance but the Diamond.

Frequent attempts have been made to produce the Diamond through artificial chemical processes, but without the least success.

The two principal regions yielding the Diamond are portions of Hindostan and Brazil. At present the latter country yields most of these gems, though the most celebrated now existing were produced by the former. We say celebrated, since, from the fact that Diamonds are the gems specially appropriated by monarchs and nobles, and the wealthiest of the people, many of them are subjects of historic fame. Indeed more than once a large Diamond has affected the fate of an Asiatic kingdom.

Diamonds were first found in Brazil in 1738, and during that same year it is stated, in the history of the period, that about eighty pounds avoirdupois (!) were taken to Europe by the Portuguese. This statement must be taken doubtlessly *cum grano*, or rather with a great many *grains*, if not indeed *pounds*, of allowance. They were however brought in sufficient quantities to alarm those in possession of the already discovered Diamonds, and they disseminated the worst slanders against the new stones, alleging that they were less hard than the Oriental ones, and calling them contemptuously Portuguese Diamonds. But

they came forth unscathed from the most searching tests, and public opinion was at last obliged to acknowledge their legitimacy.

They still continue to be found in Brazil in considerable quantities, and the pursuit constitutes a large and important business. The Diamonds are found in a loose gravel, consisting principally of rounded quartz pebbles, mixed with sand and oxide of iron, and accompanied with blue, yellow and white topazes.

In the centre of the Diamond region is the town of Diamantina; situated upon the Rio Preto, a branch of the Trapajos, itself one of the great Southern tributaries of the Amazon. This region consists of broken highlands, constituting the dividing ridge between the streams flowing North into the Amazon, and those running South into the La Plata. Up to the year 1849, it had yielded ten million dollars worth of these stones; and it is now said to produce about fifteen thousand carats per annum, less than a tenth of which however is fit for jewelry. Its climate is very unhealthy, and has already cost Brazil the lives of one hundred thousand men.

The expenses of living in Diamantina are excessively high; the various species of merchandise bringing eight hundred per cent. advance on their price at Pará. Traders between these two places exchange their goods for Diamonds and gold, for the latter also exists most abundantly in this region, and return to Pará, after an eight months' absence, with a realized profit of five hundred per cent. on their original outlay.

The principal Indian mines are named Raoleonda, Gani, Soumelpour and Saccadan, and are located in the kingdoms of Golconda, Visapour and Bengal, and in the island of Borneo. The first of these is rocky; the second terraqueous; and the other two are sandy or river mines.

In the first, the Diamonds are washed out of earthy and gravely matter, that is drawn by hooked iron instruments from the fissures in the rocks, into which this matter had been carried by rains or desiccated streams.

In the second they are washed in sieves from certain earthy and vegetable deposits, lying about twelve feet beneath the surface of the ground. In these mines the stones are generally found enveloped in earthy lumps.

The workers in these mines, men, women and children, are all slaves,—the overseers alone being freemen,—and, while at work, must be perfectly nude, with the exception of a strip of cloth round the loins. And yet, despite all precautions, the workers sometimes secrete these stones, by swallowing them, by hiding them in ulcers, and by secreting them in the corners of their eyes. As

an incentive to activity and faithfulness, every slave, on finding a Diamond of prescribed weight, is pronounced free, and may go where and engage in what he chooses. The required weight differs perhaps in each mine; but both in Asia and South America it varies not under fifteen nor above twenty carats.

The mine of Soumelpour is nigh a town of the same name. This town, lying on the banks of the river Gouel, is large and the houses are built of earth, covered with cocoanut-tree branches. The Diamond-hunting period at this place and at Saccadan is immediately after the rainy season in December. The stones are obtained by sifting the river-sands. In each of the above-named mines, from fifty to sixty thousand persons are employed.

The other Asiatic mines of less importance are in the central and southern part of India proper, and in the peninsula of Malacca.

The Brazilian Diamond districts are in Government hands, and are worked on the same general plan with the Indian.

Full particulars of the stringent measures adopted in the former country, throughout the whole Diamond district, to prevent the stones from being taken unlawfully out of the boundaries, may be found in the Travels of Doctors Von Spix and Von Marlius, made in Brazil, by the command of the King of Bavaria.* The whole region is marked out by a cordon, encircling it, extending many miles.

Diamonds have also been found in conglomerates of recent volcanic origin, called geologically amygdaloids; in gold and platinum sands in the Ural mountains; and one is reported to have been found lately in Virginia; and another in the district of Fernanagh, in Ireland. And, as they are commonly found wherever gold exists, it is not unlikely that they will eventually be discovered in quantities in various quarters of our widely extended territories, (particularly in California,) in Australia, and in Africa. Indeed mention is made in the classical authors of Diamonds received from the latter country.

The Diamond when found possesses by no means the brilliancy for which it is famous. In its natural state it is not even transparent—it is at best but translucent. To art, therefore, it owes in a great degree its renown; for its fires, which so dazzle the eye, are only released by removing the external crust, and may indeed after that be greatly increased by cutting the stone into peculiar shapes.

The method of polishing and cutting the Diamond was first discovered by Louis de Berguem, of Bruges, in 1476. The former is done by means of Diamond powder, which is obtained by rubbing two Diamonds together—the latter by fragments of Diamond set in convenient instruments. The stone to be operated on is itself firmly set by cement or soft solder in some suitable body, and requires a different setting to produce each *facet*. A *facet* is the name of any one external plane upon the Diamond.

The shape of these planes or *facets* is generally triangular and quadrangular, in consequence of course of the shape of the whole Diamond, which is required to be of a certain peculiarity, which, it is believed, is that which renders the Diamond in the highest degree brilliant. This shape will be described presently.

These operations (of polishing and cutting) are generally performed over a small, strong box, which serves to retain the powder that may be produced by abrasion as well as the fragments that result from cutting. These pieces are called technically *bort*.

The first polished stone is said to have belonged to Charles the Bold, and many romantic stories are related of it.

The last census of the United States informs us that there are twenty-eight lapidaries in its territories—sixteen of whom are in New York, nine in Rhode Island, two in Massachusetts, and one in New Jersey. But throughout the whole world the only Diamond-cutter of eminence at the present day (we mean to whom the cutting of a stone of extraordinary size would be entrusted) is M. Coster, of Amsterdam, if we except one of growing reputation in Paris, whose name we cannot recall. Within late years the steam-engine has been employed at Amsterdam to do a great portion of the cutting.

The shape, as yet discovered, which renders the Diamond the most effective in its lustre, is called the BRILLIANT, and was first adopted about a century and a half ago. This shape, in the absence of engravings, we will attempt to describe for the benefit of those readers who have not met with stones of sufficient size to have been the subjects of careful cutting. The BRILLIANT is of the shape of two pyramids, whose bases are hexadecagons, or sixteen sided, placed base to base, the upper half (in altitude) of one of which pyramids has been first cut off; the other pyramid is left complete, or at most is deprived of its vertex or mere tip. The truncated pyramid is the one which is presented to the view when the Diamond is set in any piece of jewelry, the perfect pyramid being behind or under. The truncated and the perfect pyramid are called respectively

* Reise in Brasilien anf Befehl Sr Magestät Maximilian Joseph I Konigs Von Baern. Gemacht und beschrieben Von D'r Von Spix und D'r Von Marlius. Munich: 1828. 4to.

the *table* and the *collet*, and their line of unison, or, what is the same thing, the perimeter of either's base, is called the *girdle*. The largest *facet* on the BRILLIANT is the plane of dissection of the upper half of that pyramid of which the *table* is formed, which *facet*, we have already said in effect, is that prominently exposed to view. This *facet* is a regular octagon—so is the minute one produced by the abscission of the vertex of the other pyramid—the other *facets* upon the remaining surface of the two pyramids, or rather what is left of the same, are all quadrangular and triangular.

First, as to the *table*: this contains eight square *facets*, the diagonals of which, as they are arranged, form an imaginary perfect octagon, parallel with that really produced by the truncation of the pyramid. One side of the octagon *facet*, one side of one square *facet*, and one side of the adjacent square *facet* form a triangular *facet*, and thus in all are formed eight triangular *facets*. Now there are still sixteen more triangular *facets* about the *table*. They are formed as follows. As the square *facets*, united diagonally around the *table*, incline to each other, the angles formed outside of them by the conjunction of their corners, are much more obtuse below, or next to the *girdle*, than above. In order therefore not to reduce unnecessarily the size of the stone, it is not ground down to one triangular plane between one lower side of one square *facet*, the uniting lower side of an adjacent square *facet*, and one-eighth of the *girdle*, but to two triangular planes, each of which two has one side that is identical, one side formed respectively by the two adjacent square *facets*, and the third side by a sixteenth of the *girdle*. Thus are formed upon the surface of the *table* sixteen triangular *facets* below the eight square *facets*. These sixteen, the eight square ones, and the eight upper triangular ones before described, and the large octagon shaped *facet*, forming in all thirty-three, embrace the whole external surface of the *table*.

Second, as to the *collet*. This, when not at all truncated, contains around the vertex eight lozenge shaped *facets*, whose upper sides (we speak of the *collet* as a pyramid) are all united. The spaces between the lower sides of the lozenges and the *girdle* are ground into sixteen triangular *facets*, in the same manner as in the *table*. The eight lower corners of the lozenges unite upon the *girdle* with the eight lower corners of the squares, and the sixteen lower triangles in the *table* all abut on the sixteen triangles in the *collet*. Now the vertex of the *collet* is generally cut off; this produces a small octagonal *facet*, and at the same converts the lozenge shaped *facets* into pentagon shapes. Thus the *collet* is included in twenty-five planes.

The whole surface of the BRILLIANT is then divided as follows: two octagons, eight squares, eight pentagons, and forty triangles—in all fifty-eight *facets*; and the *girdle* is a perfect heccadecagon.

The BRILLIANT is generally set in open work which attaches only at intervals at the *girdle*, allowing the light to enter under the stone. Thus the BRILLIANT when set exposes the thirty-three *facets* of the *table*, and reveals, through its large octagon *facet*, the small octagon *facet* of the *collet*, and the eight pentagons springing therefrom. It is a very beautiful mode of cutting, it must be confessed, and we doubt much if a superior form will ever be elicited.

When the stone in its natural state resembles more in shape a single cone than two conjoined at the base, or, to use a plainer simile, is more like the half of an egg, than a whole one, it is apparent how great a proportion of its bulk must needs be removed to give it the BRILLIANT shape. In such case then it is ground to the ROSE pattern. This is a simple pyramid, whose base is a perfect dodecagon, and whose surface is cut into twenty-four equilateral triangles which are also nearly equal in area. They are thus arranged: six of them have each an angle in the centre at the top; upon the bases of these, or the sides opposite the angles at the centre, abut six other triangles, whose vertices reach the base of the stone. The six triangular spaces, between the latter six triangles, are ground each into two equal triangles. Thus the ROSE is covered with twenty-four, nearly equal, equilateral, triangular *facets*, and the base is a single plane with twelve equal sides. The upper portion of the surface, consisting of the six triangles around the centre, is called the *crown*; the remainder, consisting of eighteen triangles, is called the *teeth*.

A Diamond of unusual superficial extent in proportion to its depth is polished upon its flat surfaces, and the edge is ground to any regular shape best adapted to the natural conformity of the stone, whether it be made round, oval, square, or any other regular form. This style of cutting is called the TABLE, and is the last we have to describe.

Of three Diamonds of equal weight and purity cut respectively in the BRILLIANT, the ROSE, and the TABLE form, the first exceeds in value the rest, and the ROSE rates higher than the TABLE.

The cutting and polishing of the Diamond involves a loss of nearly one-half of its weight; and, according to a rule we will give presently, a cut Diamond weighing any certain number of carats is worth about three times as much as an uncut one of the same weight, and to the value of the former must be added the cost of cutting,

which will make its actual worth about quadruple the latter.

Diamonds are estimated in value according to their weight, purity of water, regularity, fulness of form, and freedom from specks, veins, and flaws. Specks generally consist of grains of red or black sand embedded in the stone. By flaws are meant indentations in the surface—and *water* signifies *colour*—the first water meaning white. These imperfections are sought for at night by the dealers and cutters in the Indies. European lapidaries prefer making their close examinations in the day-light.

The universal standard by which the Diamond is weighed is the carat. This was formerly exactly equivalent to four grains, Troy weight, even beam; for the stone was not allowed to decline a hair's breadth. But the carat now is never of the full weight of four grains. The word is said to have been derived from *kuara*, a species of bean of remarkable equiponderance, which serves, it is further stated, in Africa and India to weigh gold dust and Diamonds. But we cannot credit that so uncertain a substance would ever have been adopted as a standard to estimate the value of such precious articles. In confirmation of this opinion we find in Tavernier (whose works will be more particularly referred to) that the carat weight is unknown all through the East! He says at Raoleonda, Gani, and Visapour Diamonds are weighed by the *mangelin*, equal to one and three-eighths carats: at Soumelpour and in the Empire of the Great Mogul by a weight called *ratis*, equal to seven-eighths of a carat. Its derivation, more probably, is from the Italian verb *caratâre*, signifying *to weigh with great care, to scrutinize*. Or possibly from the Latin *caret, it is wanting*; for the carat falls universally short of four grains, its original weight.

The price of uncut Diamonds weighing one carat is from seven dollars and a half to ten dollars, according to their purity, shape, &c.; that of BRILLIANT-cut Diamonds from thirty to forty dollars.

ROSE-cut Diamonds of one carat are worth about half as much as BRILLIANTS of the same weight and quality, i. e. from fifteen to twenty dollars.

The universal rule by which Diamonds of all sizes, both BRILLIANT and Rose, are estimated, is to multiply the square of the weight by the above prices. Thus, stones of the first water, cut as BRILLIANTS, and weighing as follows are estimated as is respectively set opposite the weights.

1 carat.	1	×	1	×	\$40	=	\$40
1½ do	1½	×	1½	×	40	=	90
2 do	2	×	2	×	40	=	160
3 do	3	×	3	×	40	=	360
4 do	4	×	4	×	40	=	640
5 do	5	×	5	×	40	=	1,000
25 do	25	×	25	×	40	=	25,000
300 do	300	×	300	×	40	=	3,600,000

One of the latter weight would be of the size of a small hen's egg, and would weigh about two ounces. There is no satisfactory evidence of the existence of a cut Diamond of this weight. The above rule is not always adhered to in the valuation of specimens of unusual size—as their owners may choose to put on them an entirely arbitrary estimate, oftentimes much exceeding that deducible from our rule.

An artist named Bourquignon has of late years attained great celebrity in Paris for his admirable imitations of Diamonds. They are made with such perfection as to deceive perfectly in the attire of a woman, and can only be recognized as false by close examination in one's own hands. All other gems are also imitated by him with the same fidelity.

Having concluded the consideration of Diamonds in general, we will now make particular mention of the few of remarkable size that have yet been brought to light. The whole number of these weighing more than thirty-five carats each does not exceed a score. Being then so few in number and so remarkable by their value, one would suppose that their minutest characteristics could be found authentically described in the first Encyclopedia referred to, or in any fugitive treatise upon the subject. Having made the fullest researches ourselves, we were surprised to find that practically there really exists no such information. In consequence of the change of possession, and of alterations in the cuttings of these stones, they have been at successive periods described under so many different names, and as of weights and shapes so discrepant, as to leave the reader, upon the perusal of all the various accounts, in the most uncertain state of mind, as well in regard to the real number existing and their present repositories, as to their actual characteristics. The further we pushed our inquiries the more irreconcilable became the various statements before us, till at length we despaired being able to furnish any reliable information upon the subject.

The reader may imagine then how great must have been our satisfaction on being shewn at this very juncture an immense *écrin* containing the most perfect models of these famous gems. These models are of recent execution, and, we believe, may be relied on as entirely authentic. They are moulded from the finest paste, and are themselves of great beauty and value. In all things, save in degree of brilliancy and hardness, they are exact reproductions of the originals as they now appear. The spectator can see at a glance the size, shape, and exact hue of every Diamond of mark known to the world, and may learn, further, its name, weight, etc., from a label attached to its model here.

This valuable and interesting series is in the possession of a Lady of Philadelphia, of whose rich Collection of works of Art and curiosities, it constitutes indeed, costly as it is, but an insignificant item. Both we and the readers of the following descriptions owe her many thanks for the free use of it she has accorded us; as it has been of essential import to the interest and proper treatment of our subject.

When we reflect how numerous are the peculiarities of these stones, and what extraordinary interest at the Courts of Europe it must have required to have invested the modeling artist with the possession, but for a moment, of these almost priceless gems, and that the exact tinge of each, and its innumerable little facets have been all faithfully reproduced, it is easy to comprehend that even these factitious stones are of great value and beauty. And, after all, value and beauty are but relative terms—a remark, the force of which becomes more apparent by an admirable and readily suggested simile: the cordial manners, refined graces, and the engaging and brilliant conversation of, *exempli gratiâ*, the lady we have referred to, sparkling from their solid setting—good sense and perfect taste—constitute a *parure* of charms, which lends her ten thousand times more lustre than would a garniture of the regal gems themselves of which we speak—exceeding them intrinsically in value as much as they in their turn surpass the “*Faux brillants et morceaux de verre*,” upon which we will now proceed to base our descriptions of the originals.

The natural order, in which they should be considered, seems to be that of their actual size.

The first of these without contradiction is that belonging to the Emperor of Russia, and set in his sceptre. Its shape, color, and an approximation to its size can be readily given to the reader, as well upon the authority of the model before us, as of numerous, authentic, concurrent descriptions of it. It is Rose-cut, and of a perfect shape except that its base has not been ground to a plane. It resembles very much in form, and is nearly the size of, the pointed half of a hen's egg, except that its surface is covered with facets instead of being of a spherical character. It is nearly colorless, and its diameter in any direction is about an inch and a quarter. Facilities for weighing it, it appears, have not been so great as for inspecting it, and we are unable to give any positive information thereupon. Suffice it to say in justification of the rank we accord it here, that its worst detractors admit its weight to be not less than one hundred and ninety-three carats, which exceeds considerably that of any other we will be called on to notice. It is proper

to state too that several writers assert that it far exceeds these figures. One of these authorities is the Encyclopedia Britannica. The date of its acquisition by Russia, or near it, may be found in that of a letter from the Hague, dated January 2nd, 1776, quoted by Boyle in the “Museum Britannicum,” from which the following is an extract: “We learn from Amsterdam that Prince Orloff made one day's stay in that city, where he bought a very large Brilliant for the empress, his sovereign, for which he paid to a Persian merchant there the sum of one million, four hundred thousand Dutch florins.” The writer, it will be observed, speaks of it as a Brilliant: this, however, is but a loose form of expression, synonymous in this instance with Diamond. The “empress” was the Empress Catharine II. The Dutch florin is equivalent to about thirty-seven of our cents, giving us the cost of the gem in our money as five hundred and eighteen thousand dollars. Other authorities state that in addition to this sum was given an annuity of about twenty thousand of our dollars, and a patent of nobility.

The history of this Diamond dates authentically from the middle of the last century. It was the greatest jewel in the possession of Nadir Shah, King of Persia, better known by the name of Kouli-Khan, which name he discarded in favor of the former, after his self-elevation to the throne. He was the greatest conqueror of the century in Asia, and extended his sovereignty as far East as Delhi, subverting the kingdom of the Great Mogul, which had flourished pre-eminently among Asiatic Governments ever since the date of its foundation by the great Tamerlane. Mahomed Shah, the fourteenth in descent from Tamerlane, after a stubborn resistance, surrendered to Nadir Shah on the 8th of March, 1739. The Persian Monarch only remained in Delhi long enough to collect the immense treasures that had been accumulating there for centuries—the value of which was estimated by the Persian chroniclers at one hundred and fifty millions of dollars! This mass of booty, containing doubtlessly the Diamond under notice, was carried back with him to Khorassan.

In the year 1747, Nadir was assassinated, and for some time succeeding his death the kingdom was torn by intestine wars. The abrupt and violent termination of his Government, and the confusion consequent thereupon, were the cause of much loss to the Crown; parts of which loss were the two celebrated Diamonds that had been in its possession, and were known to be the largest that had ever been discovered. These were carried off by the Affghans, who, being in high favor at Court, had unusual opportunities for so doing.

A Chief of this band brought one of these stones, that now under notice, to Bassora, and sold it to Shafrat, the millionaire of that country and epoch. He kept his purchase a profound secret for many years, and then ventured upon a journey into Europe: extending his excursion as far West as Amsterdam, he there offered his jewel for sale. Its purchase was nearly effected by an agent of the British Government, when Count Gregory Orloff on behalf of the Russian Empress outbid him, and bore off the matchless gem to Saint Petersburg. Much of interest in regard to this Diamond may be found in "Pictures from Saint Petersburg," published about five years ago by Jerrman, the German tragedian. This, it may be worth while to mention, is the stone concerning which is generally narrated the fabulous story of the theft of a Diamond eye from an Indian idol, by a French, and sometimes Irish, soldier.

The second in order is that called "The Grand Duke of Tuscany's." The weight of this is one hundred and thirty-nine carats. In beauty of shape and purity of water it exceeds all others remarkable for size. It is absolutely colorless, and is cut as a Brilliant of the most perfect symmetry. It is about an inch and a half in diameter at the girdle, and about an inch deep. This is said to be the same stone, now in possession of the Emperor of Austria, called "The Maximilian." But, on the other hand, a statement now before us describes "The Maximilian" to be of a lemon color, and Rose-cut, although the same account represents it further as "cut on all sides facet-wise."

The next in size is that called the "Regent" of France, and sometimes the "Pitt" Diamond. Its weight is one hundred and thirty-six and three-fourths carats. It is cut as a Brilliant, is of admirable shape, but of a blue tinge. Its diameter at the girdle is about an inch and a quarter, and its depth about an inch. It was said to have been found in Malacca, and was sent to England in 1702 by Thomas Pitt, grandfather of the Right Hon. William Pitt. He was at the time Governor of Fort Saint George, Madras. He stated in a letter published in the London *Daily Post*, dated November 3rd, 1743, that he bought it of a native merchant named Jamchund, for 48,000 pagodas. The pagoda is about a dollar and half of our money. It was purchased for Louis XV of France, in 1748, for £135,000, which is about its value, according to the mode of calculation we have before laid down, estimating a single carat of the quality of this Diamond at \$35. A commission of French jewelers, however, in 1791, estimated it arbitrarily at twelve million francs. It was worn by Napoleon in the handle of

his sword, and still remains among the Royal Jewels of France.

The fourth in the order of weight is the "Etoile du Sud." This is of recent discovery, and is the largest ever found in Brazil. It came to light in the month of July, 1853, and was purchased by the Messieurs Halphen of Paris, who are still its owners. Its weight when found was two hundred and fifty-four and a half carats. Its shape is good, and will cut advantageously. Several months ago it was laid before the Academy of Sciences for inspection, and was pronounced to be of the purest water, and exempt from blemish of any description. It is now undergoing the process of cutting by M. Coster, of Amsterdam. When completed its weight will be between one hundred and twenty and one hundred and thirty carats.

The fifth in size is "The Koh-i-noor," in possession of the British Queen. This Diamond has, thanks to the officious and extensive Press both in England and the United States, made an undue sensation in latter years, as we think any one will be inclined to admit upon a mental comparison of its weight and appearance, as we will describe them, with those of the first three already spoken of. It exceeded, it is true, in weight, but in that respect alone, the Duke of Tuscany's and the Regent, at the time of its exposition in the Crystal Palace at London. It was however almost devoid of shape. That it did not possess any beauty as an ornament, at least in that respect, may be surmised, when we state that its conformation was, as near as possible, that of the hulk of a vessel, one of whose stern corners had been completely sliced off. So uncouth was its appearance that it was determined to have it recut. This operation was commenced in August, 1852, at London, under the supervision of the most eminent artists from Amsterdam; and so mis-shaped was the object of their skill, that they were put to the necessity of sacrificing eighty-three and a quarter carats of its weight before they could reduce it to symmetry. This recutting occupied thirty-eight days of labor. Its present weight is exactly one hundred and two and thirteen-sixteenths carats, as we find stated by Professor J. Tennant in a paper read before a late meeting of the British Association for the Advancement of Science. Before the last cutting it was nearly two inches in length, about an inch in breadth, and three-fourths of an inch in depth. It is slightly tinged with a yellow color.

The authentic history of this Diamond, like that of the Russian Emperor, dates only from Nadir Shah. It had doubtlessly been obtained by him in one of his numerous expeditions to India—probably in the first, of which we spoke more particularly in our ac-

count of the Russian Diamond. In June, 1747, Nadir, as we have before stated, was assassinated by his subjects, partly from jealousy of the Affghans, who were in such favor at Court. One of this race, of the Abdallee Tribe, Ahmed Shah, had acted as Nadir's Treasurer, and, upon his assassination, was obliged to withdraw with his countrymen from Persia. The Affghans, though beset and intercepted on all sides, safely fought their way out of the kingdom, Ahmed carrying with him the Koh-i-noor. At the head of his band he performed many daring achievements, and at length became the founder of a new empire in the kingdom of Cabul. He proved to be one of the greatest warriors of the age, and carried on with prodigious success numerous wars of conquest, by which vast treasures were amassed. He also subjected Hindostan among other countries, and carried back a great deal of plunder. Upon his death (of cancer in the face), in June, 1773, the Koh-i-noor was found among the royal jewels, and descended to his son, Timoor Shah, whose death occurred May 20th, 1793. A younger son of Timoor, Shah Zemaun, succeeded as king, but was soon driven from the throne by Mahmood, his half brother, who had received the aid of Futtah Alli Shah, King of Persia. Shah Zemaun in his flight took with him the Koh-i-noor, and in his retreat stopped with a few retainers for refreshment at the Castle of Moolah Aushik, a dependent of his. He received them hospitably, but took measures to prevent their escape and sent off a messenger to Mahmood. While detained a prisoner here he secreted the Koh-i-noor, with some other jewels, in the wall of his apartment. Mahmood soon sent a surgeon to him to deprive him of his sight, the usual mode of disabling a great rival throughout the Eastern nations. His eyes having been pierced with a lancet, he was taken to Cabul and put under confinement. Mahmood, after a short and turbulent reign, was deposed by a chief named Mookhtar-oo-doulah, who had successfully fomented a revolution. Mookhtar placed upon the throne Shuja Ool Mookl, the full brother of Shah Zemaun, whose release was the first act of Shuja's reign; the next was to arrest and execute the traitor Moolah Aushik, a fate he well deserved.

The Koh-i-noor was now brought from its hiding place, where it had safely remained during the reign of Mahmood, and was seen in 1808, worn upon the person of Shuja, by Mr' Elphinstone, British Envoy to the King of Cabul. The following is an extract from the account of his reception by the King:

"We thought at first that he had on an armour of jewels, but, on close inspection, we found this to be a mistake, and his real dress to consist of a green tunic, with large

flowers in gold, and precious stones, over which were a large breast-plate of Diamonds, shaped like two flattened fleurs de lis, an ornament of the same kind on each thigh, large emerald bracelets on the arms (above the elbow), and many other jewels in different places. In one of the bracelets was the Koh-i-noor, known to be one of the largest Diamonds in the world. There were also some strings of very large pearls, put on like cross-belts, but loose. The Crown was about nine inches high, not ornamented with jewels as European crowns are, but to appearance entirely formed of those precious materials. It seemed to be radiated like ancient crowns, and behind the rays appeared peaks of purple velvet; some small branches, with pendants, seemed to project from the crown; but the whole was so complicated and so dazzling, that it was difficult to understand, and impossible to describe."*

But none of Ahmed Shah's descendants possessed a tithe of his ability, and the kingdom he founded became more and more disordered, until it was subverted, shortly after the date of Mr' Elphinstone's visit, by the victorious chief of the Sikhs, Runjeet Singh. Shah Shuja was the last of the once powerful Abdallee chiefs who possessed this stone. The particulars of its transfer by him to Runjeet are thus amusingly furnished in an article in the *New Monthly Magazine*, made up from a leader on the subject in *The Times*:

"He put the Shah under strict surveillance, and made a formal demand of the jewel. The prince hesitated, prevaricated, temporized, and employed all the artifices of oriental diplomacy, but in vain. Runjeet redoubled the stringency of his measures, and at length, the 1st of June, 1813, was fixed as the day when this great Diamond should be surrendered by the Abdallee chief to the ascendant dynasty of the Sikhs.

The two princes met in a room appointed for the purpose, and took their seats on the ground. A solemn silence then ensued which continued unbroken for an hour. At length Runjeet's impatience overcame the suggestions of Asiatic decorum, and he whispered to an attendant to quicken the memory of the Shah. The dethroned prince spoke not a word in reply, but gave a signal with his eyes to a eunuch in attendance, who, retiring for a moment, returned with a small roll, which he set down upon the carpet midway between the two chiefs. Again a pause followed, when, at a sign from Runjeet, the roll was unfolded, and there, in its matchless and unspeakable brilliancy, glittered the Koh-i-noor."

* An Account of the Kingdom of Cabul. By the Hon. Mountstuart Elphinstone, of the Honorable East India Company's service, and late Envoy to the King of Cabul. London: 1815. 4to.

Thus came this precious stone to Lahore, the capital of Runjeet Singh's dominions, and, when the Sikh provinces were annexed to British India, it followed the train of conquest, and was carried to Bombay, whence it was brought, five or six years ago, by Colonel Mackeson, Political Agent, and Captain Ramsay, Military Secretary of the India Governor-General, in the Medea Steamship, to the distant shores of England.

Instead of proceeding directly to speak of the King of Portugal's Diamond, the next in order, we will now interrupt the programme for a moment to offer some considerations upon the one spoken of by the world at large, as "The Great Mogul's," and we do so here because its history has connection with that of two of the stones that have now been described. Three hundred years ago reached Europe the fame of a Diamond in the possession of the Emperors of Mogul. Many fabulous stories were then told of remote countries like this, and this stone above all furnished a subject for a thousand marvellous narrations. All readers have probably met somewhere with the descriptions concocted in these times of the throne of jewels, of the peacock of gems, and of the great Diamond, as large as a goose egg, at Delhi. It was not difficult however to gather from all these exaggerations that a Diamond of greater size than had yet ever been known did actually exist in the possession of this Eastern monarch, but it was not until a century after its first fame was bruited, that Europe obtained any satisfactory particulars regarding it. In the middle of the seventeenth century a Frenchman by birth, named Jean Baptiste Tavernier, a person of intelligence and means, and a great connoisseur in jewelry and gems, the traffic in which became a perfect passion with him, made a number of prolonged journeys to all parts of Asia—the greater portion of a period of forty years having been passed by him in this then remote country—partly out of love of adventure, partly for speculation in the precious stones. His observations and adventures were published in Paris, after his final return thither in 1668, in three volumes pet. folio, 1676, and they are among the most agreeable and instructive writings of the kind we have ever met with.

One of the volumes opens with a profession of his penchant for the Diamond: "Le Diamant est la plus precieuse de toutes les pierres, et c'est le nègoce auquel je me suis le plus attaché."

His narration is remarkable for an air of simplicity and truth pervading it, and is as different as possible from the proverbial *contes de voyageurs*. His work must have demolished many matters of popular belief at that period, and, if still read, could serve

to correct numerous errors yet entertained. We ourselves had no idea, for example, of the limited extent within which is, and always has been, confined the burning of widows in India. Tavernier informs us that none but those who are childless are ever permitted or desire to thus immolate themselves: and even of this class, the proportion of which must be exceedingly insignificant, he says by no means are all permitted to mount their husbands' pyres—a special authority to do so being required in each instance from a Government functionary—and this permission is not *generally* accorded! A great portion of Tavernier's works consists of accounts of the Diamond mines in Hindostan, of the large jewels in possession of the monarchs of Persia, Hindostan, and other nations, and of his commercial dealings in the precious stones.

It is probable that some of his journeys were undertaken on behalf of the King of France, as that monarch became the possessor of all the remarkable gems brought back by Tavernier, making him also "Ecu-yer, Baron d'Aubonne, en considération des services que le dit Tavernier a rendu à l'Etat."

The edition* we quote from is illustrated with many engravings, among which are nearly a hundred well executed drawings of the remarkable gems that came under his observation. The first of these is of the exact form of the pointed half of a hen's egg, the convex surface of which has been ground to innumerable little planes. Tavernier says of this (p. 59. Tome IV.) "that it is the heaviest Diamond of which I have had any acquaintance. It belongs to the great Mogul, who did me the honor to have it shown to me with all his other jewels. The plate represents its form since it has been cut, and permission to weigh it being granted me, I found it as heavy as three hundred and nineteen and a half ratis, equal to two hundred and seventy-nine and nine-sixteenths of carats. It is precisely of the form of half a hen's egg."

The following is a full account of the occasion of its exhibition to him (pp. 342, 343. Tome III.): "November 2, 1665. *** I found in this chamber Akel-Kan, Chief of the Treasury of Jewels, who, as soon as he saw us enter, commanded four of the King's eunuchs to bring in the jewels, which they immediately did, upon two great dishes of wood lacquered with leaves of gold, and covered over with little napkins made expressly for the object, the one of red, the

* Les Six Voyages de Monsieur J. B. Tavernier, Ecu-yer, Baron d'Aubonne, en Turquie, en Perse, et aux Indes. Nouvelle édition. Augmentée de cartes, et d'estampes curieuses. A Paris. 1724. Avec approbation et privilège du Roy. 6 vols.

other of green embroidered velvet. After they were uncovered and had been counted piece by piece three times, a list of them was directed to be made out by three secretaries in attendance; for the Asiatics do everything with great circumspection and patience. The first piece which Akel-Kan placed in my hands was the great Diamond. It is a round Rose and very high on one side. By the setting at the bottom there is a little flaw, and there is a small speck within. It is of good water, and it weighs three hundred and nineteen and a half ratis, making about two hundred and eighty of our carats, the ratis being equivalent to seven-eighths of a carat."

It was found in the Gani mines, in the kingdom of Golconda (Tavernier, p. 18. Tome IV.) and, an article in the *Spectator* says, in the year 1550. It could not have been earlier than this, as the opening of these mines was at about this date, according to the French traveller. It went immediately into the treasures of the Kings of Golconda, where it remained uncut, but their pride, until the reign of Shah Jehan, of Mogul, the father of the famous Aureng Zebe. Koolub Shah, the then King of Golconda, was betrayed by his prime minister and chief of his armies, Mirginola (spelled at times, Meer Jumla), to the Mogul monarch, who received of him at the same time this Diamond as a present. Shah Jehan was deposed by his son Aureng Zebe, and it was during the reign of the latter that Tavernier saw it, previous to which however it had been cut, and very injudiciously, our traveller was told. He was informed that its weight *au naturel* had been seven hundred and ninety-three and five-eighths carats! over five hundred carats of which were sacrificed in the cutting by an unskilful lapidary; who was severely punished therefor, we may add.

Aureng Zebe died January 21st, 1707, and was the last powerful monarch on the throne of Tamerlane. To him succeeded his son Bahadar Shah, who died in 1712. Jehandar Shah, the latter's son, followed with a short reign of eighteen months. After four or five years of revolutions Jehandar's son, Mahummud Shah mounted the throne, and there maintained himself for twenty-one years. Up to this date the kingdom of Mogul had been the most conspicuous in Asia. But now, in 1739, like a whirlwind came the conquering Persian monarch, Nadir Shah, with his Northern hordes, and in a single campaign swept from their foundations the time honored institutions of Hindostan. The valuables, that had been amassed at Delhi during four hundred years, comprising the great Diamond we are describing, and many others of the first rank succeeding that, were born off in triumph to the capital of Persia.

It remained with Nadir Shah until his death; where is it now?

The reader of our last chapter, containing a description of the Koh-i-noor, may have been somewhat at a loss to account for the great reputation of that Diamond. The secret is that it has been identified by the British Government and the English journals, with the great Diamond of the Emperors of Mogul, the reputation of which has pervaded the world for three hundred years. With what rightful authority it has been thus identified we leave to the intelligent reader to answer upon a due consideration of the Koh-i-noor's present and late appearance and weight, and of Tavernier's description of the great gem of Mogul, and *with an important fact born in mind*, that another Diamond, much heavier than the Koh-i-noor, or any other known now to the world, of the shape and nearly of the size of the pointed half of a hen's egg, with a base or girdle somewhat irregular, actually exists in the sceptre of the Czar of Russia—the history of which is traced just as far back towards Delhi as the Koh-i-noor! It is our belief indeed that both came from Hindostan, but which is really the one, that had obtained so world wide a fame, seems too apparent to require argument. In nearly every respect the Russian Diamond answers Tavernier's description—the Koh-i-noor not in a single one. It will hardly be urged that the perfect round Rose of Mogul had, after the date of Tavernier, undergone a cutting which left it of such an imperfect hulk shape, as to require a further cutting and reduction of eighty-three and a quarter carats of its already vastly diminished weight!

A fact rather curious is worthy of mention here. The Koh-i-noor, as we have stated, before its last cutting in 1852, surpassed in weight every Diamond known except the Russian. Tavernier gives a drawing of and describes as follows the largest Diamond, next to that of the Mogul Emperor's, of which he makes any mention: "This is a view of a stone weighing one hundred and seventy-six and a quarter mangelins, making two hundred and forty-two and five-sixteenths of our carats. The mangelin, as I have said, is the weight used in the kingdoms of Golconda and Visapour, and is equivalent to one and three-eighths of our carats. Being at Golconda in the year 1642, this stone was shewn to me, and it is the largest Diamond I have seen in the Indies in the hands of the merchants. The owner permitted me to take a cast of it, which I sent to two of my friends at Surate, with a description of the beauty of the stone, and the price of it, which was 500,000 rupees, or 750,000 livres of our money, (about 150,000 dollars.) I received orders from them, in case it was free from

specks and of fine water, to offer 400,000 rupees for it. But it was impossible for me to strike a bargain at that price. I believe however that if I could have offered 450,000 rupees I might have obtained it."

Tavernier does not state, but there can be no doubt from the price asked, and from the fact that it was yet at Golconda and in the hands of the merchants, that the stone was uncut. The shape of it, as shewn in this drawing, is remarkably like that of the Koh-i-noor—the figure being oblong with one corner sliced off. The difference between their weights, two hundred and forty-two and five-sixteenths carats and one hundred and eighty-six and one-sixteenths carats, (the latter being that of the Koh-i-noor before its recent improvement,) viz. fifty-six and a quarter carats could readily be accounted for by a moderate cutting, which is all the Koh-i-noor had received, it is clear.

M'r Elphinstone, though he mentions this Diamond more than once in his book, nowhere alludes to it as the great Diamond of Mogul—indeed he calls it *one* of the largest stones known.

Although *everything* we have encountered in our researches has confirmed the truth of the opinion we have here expressed, we shall still offer one other fact which seems strongly corroborative of our view. In D'r Feuchtwanger's excellent manual, published many years ago, long before any European nation was supposed to have any interest in the Koh-i-noor, we find, amid a mass of practical information for the mineralogist and the lapidary, a few shreds of historical facts; but, few as they are, they are directly to the point we are discussing. In his preface the author gives the works of Häuy, D'r Blum, and others of similar reputation as forming the basis of his work. The copy* in our possession gives two views of each of "the two celebrated Diamonds of the Shah of Persia, the Daria-inur, and the Kuinur." The former is Rose-cut, and answer's Tavernier's description, the latter is oblong, and accords in general character with the late appearance of the Koh-i-noor. Another paragraph in the same book says: "The Diamond formerly belonging to Nadir Shah, Sultan of Persia, is now in the possession of the Russian Crown." *The Diamond* can mean nothing but *the largest, the most valuable*, one in his possession.

We have then, with an utter unconcern of the results of our researches, upon entering on them, arrived at the fullest conviction that the Koh-i-noor is not the Rose of Mogul, and that its identification therewith by England is entirely unwarranted. We

have arrived at the conviction, just as clear, that the Great Diamond of the Great Mogul actually rests at the present moment in the sceptre of Russia. Here is a specimen of the fine English writing that must fall to the ground, if there is any force in our foregoing statement of facts: "In this way did the Koh-i-noor pass as the Emblem of Dominion from Golconda to Delhi; from Delhi to Mushed; from Mushed to Cabul; from Cabul to Lahore; from Lahore, as the prize of Saxon valor, to the shores of England. It may with justice be considered to be an Emblem of Prosperity and Dominion; and, as the brightest jewel in Queen Victoria's Crown, there can be little doubt of its remaining, what it has ever been, a brilliant token of power and ascendancy."

Before entirely dismissing the Russian Diamond we will give the origin of the story of its theft from the Indian idol, of which same romance one of the Crown Jewels of France has been made the subject in a letter of a French missionary, published in the *Journal des Savans*, for July, 1774. These stories are all unquestionably founded on the following which we translate from Tavernier, (pp. 143, 144. Tome IV:)

"Jagrenate is the name of one of the mouths of the Ganges, upon which is built the great Pagoda; where the Chief Bramin, that is the High Priest of the Pagans, holds his residence. The Great Idol, which is on the altar in the church, has two Diamonds for its two eyes, and a collar about its neck, which hangs down upon the stomach: the least of these Diamonds weighs not less than forty carats. Upon its arms are seen bracelets, sometimes of pearls, sometimes of rubies. This magnificent Idol is called Kesora. The revenues of this great Pagoda are sufficient to feed every day from fifteen to twenty thousand pilgrims, for such numbers frequently assemble, this being the place of the greatest devotion in India, drawing crowds from all directions. It should be remarked that the Jewelers, who are attracted here as other people are, are not permitted to enter the Pagoda, ever since one of their profession contrived to have himself locked in at night, and then extracted one of the Diamond eyes of the Idol. Upon making his exit in the morning, when the Pagoda was opened, he fell dead upon the door-sill, through a miracle, say the natives, of the Idol, in order to punish his sacrilege."

The sixth Diamond of note belongs to the King of Portugal. It weighs ninety-three and three-quarters carats. It is about an inch and a quarter long, by an inch in width and in thickness. It is of an extremely irregular form, having been but little cut, and is very slightly tinged with yellow. The Portuguese have spread a report that their great Diamond

* A Treatise on Gems. By D'r Lewis Feuchtwanger. New York. 1828. 8vo.

is as large as a hen's egg, and this is believed by many. The English *en revanche* have published statements that the Portuguese stone is only a topaz. It was obtained by the Prince Regent of Portugal (afterwards Don John VI), when he was in Brazil in 1808. The slave, who found it, received his freedom and a pension for life for himself and his family.

The seventh is known by the name of "The Blue Diamond." It is cut as a Brilliant of exquisite shape, and is about an inch in diameter and three-quarters of an inch in thickness. Its weight is seventy-seven carats. It is valued at an unusual price on account of its rich blue tint. It is, we understand, now in the possession of England.

The eighth is called "The Pacha of Egypt's," and is in his possession. It is of very regular form and nearly of the size of "The Blue Diamond." It is of the first water, and weighs sixty-nine carats.

The next is known as "The English Lottery Diamond." It was brought in the latter part of the last century to England by Earl Piggott, Governor-General of India, and was disposed of by lottery in 1801, for £30,000. It fell to the lot of a private individual, who sold it, it is believed, to the Pacha of Egypt. It is of good form and of about the size of a cent. It weighs forty-seven and a half carats, and is tinged with blue.

The tenth is the "Saucy Diamond," weighing only thirty-three carats, but possessing considerable historic fame. Although many very early stories are related of it, its authentic career dates from the time of Henri Quatre of France. In his reign it was in the possession of M. Nicolas Harlay de Saucy, who sent it by a faithful servant to his "uncle," a Jew, at Metz, to raise a loan for his sovereign then at war. The servant was assassinated not far from Paris, whether because he carried this stone, or not, was not discovered. M. de Saucy shortly after proceeded to the spot of his burial, disinterred and opened the body and found the Diamond. The faithful Servitor had swallowed it, on being attacked, according to his master's orders. "The Saucy" is of blue water, and of square form, and an inch nearly in size, with a thickness of half an inch. Since the time of M. de Saucy it has been in the possession of the French monarchs.

The eleventh is called "The Polar Star." It is of an egg shape, flattened at the sides, and nearly an inch long, three-quarters broad, and a half thick. It is of the first water, and weighs thirty-two carats. This stone, we understand, is in the possession of France.

Several of the Diamonds we are now about to mention would, probably, in justice pre-

cede in rank some of the latter ones of the foregoing enumeration, but, as their weights and other characteristics have never been satisfactorily made known to the world, we can only give this general account of them.

A Diamond of an egg shape, with the small end indented, is in the possession of the Rajahs of Mattan, in Borneo. This is *said* by some travellers to be the largest Diamond ever discovered. Several European agents have made frequent ineffectual efforts to purchase it.

One called "The Shah," is in possession of Russia. It is of an irregular oblong form, about an inch in length, and half an inch in width and thickness, and of a blue color.

"The Green Diamond," belonging to the King of Saxony, is the largest known of its color. It is kept in "The Green Vault," a mineralogical museum at Dresden. It was bought by Augustus the Strong, in Warsaw, for sixty thousand thalers.

The East India House possesses one known as "The Nassac Diamond," which was part of the spoil taken in the English war against the Mahrattas. It is described as of irregular form, but of fine water.

A conical Diamond of unusual size is in possession of Holland; and a large one, in the shape of a pyramid, is among the Portuguese Crown Jewels.

The late Duke of York possessed one almost black, and of great size and beauty.

A Diamond about the size of a large hazelnut was found last winter at Manchester, near Richmond, Virginia. It is of the first water, but holds several black specks in its centre. *The Ledger* stated, at the time, that it weighed nineteen carats, and was found by a laboring man, in the employ of Mr. James Fisher, Jr. *The Evening Post* of April 28th, 1855, says:

"We were shown yesterday, on board the steamship Jamestown, what is said to be the largest Diamond ever discovered in North America. It was found several months ago by a laboring man named Benjamin Moore, at Manchester, Virginia, in some earth which he was digging up. The Diamond was put in a furnace for melting iron at Richmond, where it remained in a red heat for two hours and twenty minutes. It was then taken out and found to be uninjured and brighter than ever. It was valued in Richmond at \$4,000. The finder of the prize is a poor man with a family."

The ancients, as we have intimated, attributed occult and miraculous properties to many of the precious stones, as may be seen discussed at large in Pliny, and particular gems have been marked by their own distinguishing fables. The same notions have more or less continued down to times not long past. Even a philosopher, so eminent

and modern as Boyle, published a treatise on the sanative, and life, health, and beauty conserving virtues of the precious stones. Thus, a dose, which he denominates *electuarium e gemmis*, will stave off, he says, the approaches of old age.

Some superstitions and anecdotes relative to the Diamond may be worth quoting before we take leave of it.

The Diamond has been regarded as bearing a mysterious relation to the Sun; as setting at defiance all subduing and destroying agencies, save the solar ray—a tradition which seems to have been so powerful as to have influenced M'r Boyle to make the attempt to dissolve it by a powerful lens, an experiment, the first, which proved successful, and the one we have before alluded to as performed by the lens of extraordinary power in the possession of Cosmo III, Grand Duke of Tuscany.

Pliny asserts that the Diamond and the magnet are naturally inimical to one another, and in mediæval times the Diamond was considered an antidote to poison, a safeguard against mania, and even a preservative of virtue. The peculiar color of each of the precious stones rendered it the emblem of many things. Thus the Diamond, being white, signified light, purity, faith, innocence and virginity.

The London *Athenæum* in a late article stated that in ancient wicked times it was used to detect infidelities; that, if placed upon the head of a slumbering wife, it would compel the sleeper to betray the secrets of the bosom. The mode of this self-disclosure we find described in an old book, by Thomas Nicols*:

"If a true Diamond be put upon the head of a woman without her knowledge, it will make her in her sleep, if she be faithful to her husband, to cast herself into his embraces; but, if she be an adulteresse, to turn away from him."

This is a philosophical superstition that might be safely believed in, we should imagine; we should not be surprised indeed if the actions described would duly ensue without the use of the Diamond.

The *sang froid* of the husband, our "sometimes" Cantab. does not appear to have believed susceptible of influence, and the boldness and frequency with which these gems are presented nowadays to the wife at various recurring fêtes seem to confirm the correctness of this view. Master Nicols says further, "that it is esteemed powerful for the driving away of Incubos and Succubos."

The Jewish Rabbis say that Eve, on quit-

ting Paradise, had her ears bored in token of her subjection to man. On this a commentator remarks that the women have revenged themselves for this sign of degradation by compelling the men to suspend to their ears Diamonds and other costly stones, which they must procure by wearisome toil.

The sign of subjection should have been the complete excision of the ear, and we remember that, at Trimalcyon's feast, one of the revellers says that, as his wife's Diamonds have absorbed nearly his whole estate, if he ever has a daughter he will cut off her ears at her birth, to avoid first his own utter ruin, and, secondly, that of her future husband.

It seems rather strange that in so celebrated a crown as that of Saint Stephen's of Hungary, which has always served at the coronation of the Austrian monarchs, there should have been no Diamonds. It is described as being of pure gold, ornamented with one emerald, fifty rubies, fifty-three sapphires, and three hundred and thirty-eight pearls, weighing in all fourteen pounds. This is the crown that was stolen during the late Hungarian insurrection, and has never since been found: the coronation of the Emperor of Austria seems consequently to be indefinitely postponed.

The Crown of England is composed of Diamonds and Pearls, chiefly of the former, of which there are about seventeen hundred, valued altogether at half a million dollars.

Russia has always been noted for the display of Diamonds made by its noble classes. The following are brief extracts from "The Life of Prince Potemkin,"* a successor, in the affections of Catharine II, of that same Prince Gregory Orloff, who bought her the large Diamond from Persia:

"At the same time her Majesty adorned his neck with a Diamond collar, of the order of Saint Alexander, worth 60,000 roubles."—(p. 187.)

"She sent him 100,000 roubles in gold; a crown of laurels made of emeralds set with superb Diamonds, and valued at 150,000 roubles; and ordered three gold medals to be struck to his honor."—(p. 214.)

"The Prince handed the Empress from her coach. He was dressed in a scarlet coat, over which hung a long cloak of gold lace, ornamented with precious stones. He wore as many Diamonds as a man can wear in his dress. His hat, in particular, was so loaded with them that he was obliged to have it carried by one of his aides-de-camp."—(p. 230.)

But when we read the following it causes us to wonder at the real profusion of Dia-

* A Lapidary: or the History of Precious Stones. By Thomas Nicols. Sometimes in Jesus Colledge in Cambridge. Cambridge, 1652. 4to.

* Memoirs of the Life of Prince Potemkin, Field Marshal, &c., &c.. Comprehending original anecdotes of Catharine the Second and of the Russian Court. Translated from the German. London. 1812. 8vo.

monds actually existing. It is a list of those presented by Catharine II to her various favorites. We collate it from a work of high interest.*

To Wasielitschikoff Diamonds of the value of 60,000 roubles. To Zawadofsky, Diamonds worth 80,000 roubles. To Zoritz, Diamonds worth 200,000 roubles. To Korkzakoff, Diamonds worth 50,000 roubles. To Lanskoi, Diamonds worth 80,000 roubles. To Yermoloff, Diamonds worth 80,000 roubles. To Plato Zouboff, Diamonds worth 100,000 roubles.

The value of those presented to the five brothers Orloff, and to Potemkin and some others, is not particularly stated, but it far exceeded the total of those sums we have enumerated. The Jewels and other presents showered upon her lovers by this munificent sovereign is estimated in this book at 88,820,000 roubles!

Amongst the Russian Treasures at Moscow are three crowns, first, that of Peter the Great, containing 887 large Diamonds; second, Ivan's, 841 Diamonds; and third, the Imperial Crown, with over 2,500 large Diamonds. There are also two saddles of the Empress Catharine II, completely covered with Diamonds.

The French Crown Jewels have just been overhauled, some new set, and the whole exposed in the Great Exhibition now open in Paris. An inventory of them has also been published, from which we collate some interesting facts. The "Regent" is estimated at five million francs, which is reached on the basis of one carat of its quality being worth about fifty dollars. This is falling off considerably from the value set upon it by the Commission of 1791. The whole number of precious stones is 64,812, weighing 18,751 carats. The Crown contains 5,352 Diamonds, of which 5,206 are Brilliants, and the others Rose-cut. One sword is set with 1,576 Brilliants, and another with 1,506 Rose Diamonds. There are two clasps, the one mounted with 217, the other with 197 Brilliants, and a chapeau button formed of 21 similar Diamonds.

The *North American* correspondent, writing from Paris, says of these Crown Jewels: "There are bouquets of Diamonds, with cords and tassels to match, to tie round the waist, and Diamond stomachers, filled with stones, only inferior in size to the 'Regent.' In one case alone twenty-eight Diamond necklaces lie exposed in rows of light, supported by a fan encrusted with the same, while a Diamond comb adjoining places the

head of the happy wearer at least on an equality with the hand. They occupy a pyramidal case of nine divisions, at the apex of which is placed, alone and unset, the 'Regent,' a Diamond of wonderful size and beauty, square in shape, and slightly rounded at the corners."

The same writer says that the "Regent" was stolen from the Royal *Garde-Meuble* during the French Revolution, but was soon after recaptured, and then pledged by the Directory for 6,000,000 of francs to the Bank of Amsterdam. It was redeemed by Napoleon immediately after the battle of Marengo. *L'Europe Artiste* of July 29th, 1855, says that this stone will shortly be placed in the hands of the eminent Jeweler, M. Le-monnier, to be set in a new Imperial Diadem, which he has been commissioned to execute.

Since the printing of those pages in which we spoke of the "Etoile du Sud," we have learned from a late number of the *North American* that the cutting of that stone has been completed, and that it is at present placed in the French Exposition. The Paris correspondent of that paper says:

"The Diamond is well exposed to the light, being simply suspended between two metal points which allow it to be seen on all sides. The faces of the cuttings are unusually large, but, if one may judge by the fire which they throw out, and the brilliant prismatic colors displayed, the operation has been scientifically and successfully conducted. The stone appears perfectly colorless, and of elegant oblong form." "Its weight is one hundred and twenty-five and a half carats, but, owing either to the superiority of the cutting, or to the unusual thickness, nineteen millimetres* from the *table* to the extreme point behind, the refraction of light is wonderfully great, and, when the level sun falls rightly upon it, its fires are really magnificent." "The 'Etoile du Sud' is at this moment in the market positively to be sold, if a buyer can be found." Its weight, as above stated, sanctions our classification of it. (p. 12.)

When penning our remarks upon the "Koh-i-noor," and "The Great Mogul's Diamond," (pp. 12, 13, 14, 15, and 16,) we sought in vain for some official English statement of the grounds of the identification by them of these two stones, and the conclusion we arrived at, though unavoidable from the facts before us, was not unaccompanied by the fears of the existence of some absolute

* Vie de Catharine II, Impératrice de Russie. Avec six portraits gravés en taille-douce. A Paris. 1797. (2 vols. 8vo.)

* Nineteen millimetres are equal, within a shadow of a fraction, to three-fourths of an inch. This distance, the writer evidently means, is from the centre of the prominent facet of the *table* to the apex of the *collet*.

adverse proof which we had been unable to encounter. Since then we have found what we presume to be the strongest statement of proofs that the English Court can put forth upon the subject. It appears in Vol. II, p. 695, of the "Official, Descriptive and Illustrated Catalogue" of the "Great Exhibition of the Works of Industry of all Nations," in which, it will be remembered, the "Koh-i-noor" was exposed to the public by the Queen. It is published "By Authority of the Royal Commission," and four large columns of print are devoted to the subject. We were greatly surprised, after an attentive perusal of the same, that a claim of such magnitude, so universally made by English writers, does not even pretend to possess a shadow of proof to support it. The Diamond is traced back, as we have done it already, to Nadir Shah, and the "Great Mogul's" is traced down to that personage. But that this latter stone was the one carried off into Cabul, upon the truth of which rests wholly the "Koh-i-noor's" authenticity, not a word of evidence is offered. The whole of this momentous portion of its history is thus briefly given, and without the support of a single reference:

"After Nadir Shah's death, the Diamond, which he had wrested from the unfortunate representative of the House of Timur,* became the property of Ahmed Shah, the founder of the Abdali dynasty of Kabul, having been given to him, or more probably taken by him from Shah Rokh, the young son of Nadir."

This is poor indeed. But the Court scribe has still a difficult task before him. Tavernier has carefully weighed, and minutely described to the world, the "Great Mogul's Diamond," and that stone, by him thus described, has become famous throughout the land—and the "Koh-i-noor" obstinately will not accord with Tavernier's statements.

So our writer says: "Tavernier of course took the actual weight with the native standard of weight, the rati, and his valuation of the Diamond at two hundred and seventy-nine and nine-sixteenths carats was the result of a mistaken notion of the weight of the rati!"

He then deduces from other authorities the weight of the ratis, (spelt by him rati,) and makes it out, instead of seven-eighths of a carat, a little over two grains. Upon this basis three hundred and nineteen and a half ratis equal one hundred and seventy-five carats! This, it is true, is nearer to one

hundred and eighty-six and one-sixteenth carats, (the "Koh-i-noor's" late weight,) than to two hundred and seventy-nine and nine-sixteenths carats, to which Tavernier says three hundred and nineteen and a half ratis are equal, but it is still some distance therefrom. That discrepancy however the enterprising writer thus disposes of:

"The weight of one hundred and seventy-five carats is a sufficiently near approximation to the actual weight of the 'Koh-i-noor,'* one hundred and eighty-six carats, taken with more perfect scales and weights than the Imperial Jewelers were likely to have provided, and with more care and deliberation than Tavernier might have had the opportunity of exercising."

When the reader is reminded that Tavernier was a Diamond merchant by profession, that he spent nearly forty years in Asia, that he brought back to France a vast number of Diamonds, Rubies, and Pearls, all bought in the East by the ratis, that he published with great care and elegance the results of his travels, illustrating his account of the "Great Mogul's Diamond" with a well executed engraving, and that he repeatedly speaks both of the weight of this Diamond and of the weight of the ratis—when the reader is reminded of these facts, we say—it will be difficult for him to credit that this famous "travelling Jeweler," as Gibbon calls him, could, first, have made a mistake of nearly a hundred per centum in the value of the delicate ratis, and, secondly, in addition thereto, have blundered to the extent of eleven carats in weighing the most precious stone ever deposited in his hands, or indeed known to the world!

It seems hardly fair either that the official account of the "Koh-i-noor" should pass over in perfect silence Tavernier's description of the beautiful shape of the Mogul stone, and his engraving thereof, without attempting to reconcile it with the long bulk of the "Mountain of Light!"

Although we found no use of the word "Koh-i-noor" made before the date of Nadir Shah, and believed that none such had been made, we hesitated to assert this as a fact, for fear that the "Mogul's Diamond" might, in some authority we had not encountered, have been so styled; but the official history of the "Koh-i-noor" absolves us from the responsibility of making this assertion.

It says: "The appellation 'Koh-i-noor' is not given to the great Diamond of the Mogul Emperors." "Nadir Shah is said to have bestowed upon it the name of 'Koh-i-noor'." If then, even so poor a proof as the coincidence of names does not exist, we cannot

* Our references to this celebrated historical character have been by the name of Tamerlane. Either appellation may be used at random. Tavernier calls him Temur-leng, and says that the word means *Le Bouteux*, a term personally applicable, he says, to the Tartar chief.

* It had not yet at this date undergone its re-cutting.

conceive upon what grounds at all it has ever been asserted that England is in possession of the "Great Mogul's Diamond."

This account, in order we presume to add to the fame of the stone, pretends to give its history from a remote period. It is made up from occasional references by Indian historians to large Diamonds, and the "Koh-i-noor" thus becomes the hero of all the early stories related of any and every conspicuous Diamond. Such a history may be considered, of course, as purely fabulous. It is as follows. It was found 3001 years before Christ, and was worn by Karna, King of Anga. It was next heard of as belonging to Vikramaditya, the Rajah of Ujayin, fifty-six years before Christ, and his successors, the Rajahs of Malwa. Malwa was conquered and overcome by Alla-ud-din, Sultan of Delhi, in 1306. From him it passed to the Bikermajit family of Agra, who presented it to Humayun, who presented it to Sultan Baber, who presented it back to Humayun. After this, it passed permanently, until Nadir's arrival, into the possession of the Emperors of Mogul.

The recent history of the "Koh-i-noor," as here given, is doubtlessly quite authentic, and, as it is somewhat more precise than that related by us, we shall quote from it: "After Runjet's death it was worn by Khurruk Sing and Shir Sing. After the murder of the latter, it remained in the Lahore Treasury until the surpercession of Dhulip Sing, and the annexation of the Punjab by the British Government, when the civil authorities took possession of the Lahore Treasury, under the stipulation, previously made, that all the property of the State should be confiscated to the East India Company, in part payment of the debt due by the Lahore Government, and of the expenses of the war. It was at the same time stipulated that the 'Koh-i-noor' should be surrendered to the Queen. The Diamond was conveyed to Bombay by Governor-General the Earl of Dalhousie, whom ill health had compelled to repair to the coast, and was there given in charge to Lieut. Col. Mackeson, C. B., and Capt. T. Ramsay, the Military Secretary to the Governor-General, to take to England." They left Bombay with it April 6th, 1850, arrived in England June 30th, and surrendered it, July 2nd, to the Chairman and Deputy Chairman of the Court of Directors, who, with the President of the Board of Control, presented it, July 3rd, to Her Majesty."

We should have stated in speaking of the "King of Portugal's Diamond" (pp. 16, 17) that several French authorities give its weight as one hundred and twenty carats, which would fix the "Koh-i-noor" as the *sixth* in order of the large Diamonds. We stated the weight, ninety-three and three-quarters carats, as

given with the model from which we described it.

The weight of "the Pacha of Egypt's Diamond" was there misprinted sixty-nine instead of forty-nine carats.

We have learned that M'r Henry Thomas Hope, of London, is in possession of a blue Diamond, weighing one hundred and seventy-seven grains. If this were *seventy-seven carats* it would accord with the weight of the "Blue Diamond," which we have described. It is more probably "The English Lottery Diamond;" for one hundred and seventy-seven grains are equivalent to a little over forty-five and a half carats, which is nearly the weight we have accorded "The Lottery Diamond," and it also has been described as of a blue tinge.

The Parisian correspondent of the *North American* says that the "Sancy" was also stolen from the Royal *Garde-Meuble* during the French Revolution, and became ultimately the property of the Emperor of Russia.

On page seventeen the "Sancy Diamond" was described as of square form, and "The Polar Star" as of an egg shape, flattened at the sides. These descriptions apply reversely to these two stones.

We should have mentioned also on the seventeenth page, that "The English Lottery Diamond," "The Sancy," and "The Polar Star," are all cut as Brilliants.

D'r Feuchtwanger says "The Nassuc Diamond" weighs three hundred and fifty-seven and a half grains, (91.95 carats,) and that it was sold at the auction of Mess'r's Rundell & Bridges in 1837, for \$36,000.

He says at the same time were sold a pair of Brilliant ear-rings, weighing two hundred and twenty-three and a half grains, formerly the property of Queen Charlotte, for \$55,000; a Brilliant drop, seventy-nine and a half grains, for \$5,900; and an oblong Brilliant, one hundred and fifty-one and a quarter grains, for \$14,000.

A Diamond valued at 200,000 francs, and a diadem set with 9,000 Diamonds, are now exposed, at the French Exhibition, by Mess'r's Marret & Beaugrand, prominent Jewelers in Paris.

We learn from *L'Europe Artiste* of Aug. 5th, 1855, that the House of Marret & Jarry have just completed a splendid necklace of Diamonds—2,000 in number, and weighing in the aggregate one hundred and twenty carats. The price of 120,000 francs is put upon it.

On page ten we hazarded some conjectures as to the origin of the word carat. Since that has been printed we have fallen upon, incontrovertibly, the origin of the word, and, although our opinion of the ordinary "bean derivation" is shewn to have been correct, neither of our own theories has

proved so to have been. Thomas Nicols, in his old book on "Pretious Stones," quoted by us before, uses throughout it the word *ceratium*, and plural *ceratia*, in speaking of the weight of gems. He makes it clear also that it was equivalent to our carat, by the following sentence: "Monardus writeth that he saw Diamonds in Bisnager (Visnapour) that weighed 140 *ceratia*, and every *ceratium* is *four grains*." If anything is wanted to confirm this origin it may be found upon referring to this word in the Latin Lexicon, which shews us that it was derived by the Romans from the Greek *keration*, and describes it as "the name of a very small weight or measure." Being of such Greek derivation, the Latin word is to be pronounced with the *c* hard, which will give us almost the identical word we use.

We have found a remarkable confirmation of Tavernier's account of the Diamond mines of India, in a paper read before the Royal Society in the latter part of the seventeenth century.* This examination must have occurred too at about the same date as that of Tavernier's visits to India. "Curre" and "Gani" seem to be used indiscriminately by Tavernier and other writers as the name of the same mines. One little old book† calls them *Coullour*: "The second mine is called *Coullour* in the Persian language, and the Idolaters of the country call it *Gany*." The mines visited by Dr. Voysey in 1823, about three miles from the Krishna river, and called by him Partiala, are said to be the same mines. We extract a curious paragraph from the Earl Marshall's article:

"About sixty or seventy years ago, when the Curre mines was under the Government of the *Hundues*, and several Persons permitted to adventure in digging, a Portuguese Gentleman went thither from *Goa*, and having spent in Mining a great sum of Mony to the amounts of 100,000 pagodas, as 'tis reported, and converted every thing he brought with him, that would fetch any mony, even to what wearing Cloaths he could spare, while the Miners were at Work for the last Day's expence, he had prepared a cup of Poyson, resolving, if that Night he found nothing, to drink his last with the conclusion of his Mony; but in the Evening the Workmen brought him a very fair spread Stone of 180 mangelleens' weight, in commemoration whereof he caused a great Stone to be erected in the place, with an Inscription engraven on

it, in the *Hundues* or *Tellinga* Tongue, to the following effect, which remains to be seen to this day:

Your Wife and Children sell, sell what you have,
Spare not your Cloaths, nay, make your self a Slave;
But money get, then to Currure make hast;
There search the Mines, a Prize you'll find at last.

After which he immediately returned with his Stone to *Goa*."

On our fifteenth page we gave Tavernier's account of the largest Diamond he saw in India in private hands, and states its weight to have been one hundred and seventy-six and a quarter mangelins. This is so near the weight of that referred to in the above paragraph, that it would seem probable that these two accounts refer to the same stone.

"The History of Jewels," by the by, above referred to, is chiefly made up of extracts from Tavernier, without a word of credit, but still, in such quaint English, that we are tempted to give the reader a slight taste from the Preface:

"There is nothing more admirable in this lower world then precious stones, seeing they are the starres of the earth, and shine in competition with those of the firmament, disputing with them for splendor, beauty, and glory. Nature produceth nothing more rich, and sufficiently confesseth it, in her most careful laying them up and hiding them in her private cabinets and repositories in the inner parts of the earth, so that they are not easie to be come by; but their value and price make them worth the searching for, even through the bowels of the world."

Tavernier informs us that, in the language of the Hindostan miners, the Diamond is called *Iri*; in Turkish, Persian and Arabic, *Almas*; and, in all the European languages, something analogous in sound to the word *Diamond*.

The Diamond is now used extensively in the mechanical arts; it is used for powerful lenses, for engraving on copper and steel, and upon all hard stones, for cutting glass, for sockets to pivots in watches, and for various other purposes by dentists, turners, chinamenders, lapidaries, &c.

It is time now to dismiss the Diamond, but, in proceeding with the other stones upon the list, the reader need not apprehend that each will be treated at the same length; for the interest attaching to this gem exceeds that of all the other precious stones combined.

The Sapphire in hardness comes next to the Diamond. It is one of the varieties of that vast genus the silex. Its chemical composition is pure alumina crystallized. The colour most commonly understood to attach to the Sapphire is blue, and therefore the poets are

* "A Description of the Diamond-mines, as it was presented by the Right Honourable the Earl Marshal of England, to the Royal Society." Published in the Annals of that Society.

† The History of Jewels, and of the Principal Riches of the East and West. Taken from the relation of Divers of the most famous Travellers of our age. London. Printed by T. N. 1671.

wont to sing of Sapphire skies. It is also found occasionally gray, white, green and yellow. In shape it is usually rhomboidal. Haüy names it the "telesie," and Bournon the "perfect corundum." Being silicious in its nature it approaches in its hardness close upon the Diamond, while, in its blue species, it is very beautiful. The deep-blue Sapphire is named by the lapidaries the "male," and the pale-blue the "female."

It is acted upon by neither the acids nor the blowpipe. It is found mostly in the beds of rivers, especially in Ceylon and in the southern part of the Burman Empire.

This stone through its blue color was the emblem of heaven, the firmament, truth, constancy, and fidelity. The Jewish priests wore robes and breast-plates of this color as significative of heaven.

The Hebrew Rabbis declare this to be the stone of which the rod of Moses and the Tables of the Law received on Mount Sinai were composed. Thomas Nicols, whom we have before quoted, says (as it is useful to know) that "the Sapphire if worn by an adulterer loses its splendor, and the wearing of it quells the animal senses;" "if put into a glasse with a spider it will quickly die;" "it keepeth men chaste, and therefore is worn by priests."

Fine specimens bring high prices. The late M'r Hope purchased one from the Parisian Jardin des Plantes, paying therefor the considerable sum of £3,000.

The French crown contains 59 of these stones.

A Sapphire weighing seventy-five and a half carats was sold, says D'r Feuchtwanger, at the auction of Mess'r's Rundell & Bridges, for \$2,465.

The Ruby is, chemically, the same as the Sapphire except so far as it is affected by its coloring matter. It ranks next to the Diamond in value. A fine specimen of the Oriental Ruby is rarer than even the Diamond itself.古iently it went by the name of carbuncle, as it does occasionally now. It is a species of silex or quartz, and therefore participates in the natural hardness of that stone. As its name indicates, it is red in color—a carmine-red—and a very beautiful ornament for the "ornamental sex." They are found in Hindostan, in Ceylon, in Bohemia, and in Hungary.

The largest Ruby known is said to be in the Imperial Russian Crown, in which it is placed under the cross. It was bought for the Empress Anne in Pekin, for 120,000 roubles, by her ambassador to that city.

Tavernier gives drawings of and describes several remarkable Rubies he saw in the East.

First is one that belonged to the King of

Persia, nearly as large as an egg and of that shape, of deep color, and of unknown weight. It had been for many years in the treasury of that monarch.

The second figure is that of a stone sold as a Ruby to Giaferkan, uncle of the Great Mogul, for 95,000 rupees (\$285,000), and presented by him to the Emperor. A discharged old Jeweler of the king, having found some opportunity of examining it, declared that Giaferkan had been deceived, that it was not a Ruby, and was not worth over 500 rupees. The king's Jewelers were convened to decide upon the matter, and they declared their belief in its genuineness. As in the whole Empire of the Great Mogul there was no person more skilled, it was believed, in the knowledge of precious stones than Shah Jehan, then detained a prisoner at Agra by his son, Aureng Zebe, the latter sent the stone to his father, begging his opinion. He confirmed the views of the old Jeweler, and said it was not worth more than 500 rupees. The stone having been brought back to Aureng Zebe, it was returned to the merchant who sold it, and he was forced to disgorge the money he had received for it. This stone was of an egg-shape.

The next is a view of one weighing seventeen and a half carats, in the possession of the King of Visapour, of the shape of half an egg. It is well cut, and of the greatest beauty. It was bought in 1653, for 14,200 new pagodas, (about as many dollars.)

We have then described one "weighing fifty and three-quarters carats, of the second water, uncut, and almond-shaped. It was offered to me at Banarous for 55,000 rupees."

Tavernier says that Rubies were so scarce in Asia that he found it profitable to take them thither from Europe to sell.

He says he found them so preciously guarded, that a merchant would never shew a Ruby, even if an insignificant one, unless you agreed to give him some trifling present, as a cap or belt, in case you did not buy.

He speaks of one weighing five carats, found in Bohemia, and presented by General Wallenstein, Duke of Fridland, to the Viceroy of Hungary.

In the Green Vault at Dresden there is a pair of Ruby ear-rings, which have been valued at 24,000 thalers, though at present they would probably bring a much higher price, owing to these gems being greatly in fashion. The above sum would be about 18,000 of our dollars. The English Crown contains a large heart-shaped Ruby.

Ludovicus Vartomannus, a lying old Roman, says that the King of Pegu, in India, had a Ruby which could illuminate a dark room as brilliantly as could the sun!

Andreas Baccius says in his book, *De Na-*

tura Gemmarum, that if danger approaches the wearer of a Ruby, it will turn black, and, upon the danger being past, resume its color again !

Nicols relates the following of Baccius and a Ruby he possessed enclosed in a gold ring: "On the fifth of December, 1600, he was travelling with his wife, Catharina Adelmania, to Studgard, and in his travel he observed his Rubine to change its glory into obscuritie, whereupon he told his wife, and prognosticated that evil thereupon would ensue either to himself or her, which accordingly did; for not many days after his wife was taken with a mortal disease and died; after which he saith his Rubine of its own accord did again recover its former lustre, glory, beauty, and splendour."

The Topaz, according to Ure, is still another form of the silex or quartz. It is found crystallized in rhombic prisms in Brazil, Siberia, and Saxony. It is transparent and translucent, and commonly of a wine-yellow colour, but frequently sulphur coloured, and rose-red. Sometimes it occurs perfectly limpid. It is not affected by the acids. It becomes electric from heat or friction, and to such a degree as to make it distinguishable, by this property, from other stones that may chance to resemble it. See Nicol's Manual of Mineralogy,* pp. 255, 257, also D'r Feuchtwanger's Treatise, p. 80. The principal supply of this gem is from Brazil, where it is sought in the rainy season, in the same manner, and in the same localities, as the Diamond. The annual production from this region is about forty pounds. The white, and the rose-red are the most valuable. The former are called by the Portuguese *pingos d'agoa*, (drops of water,) and, when cut, they closely resemble the Diamond in lustre and brilliancy. The Brazilian yellow Topaz, when exposed to heat, becomes reddish, and bears a strong resemblance to the Ruby, but may be distinguished from it by the electricity it is capable of evolving. The Saxon pale-wine coloured Topaz, when exposed to heat, becomes colourless. It is said to have derived its name from an island in the Red Sea, where the first specimen was found by a Mauritanian King. The name however, *topazion*, has existed in the Greek language from time immemorial, but whether it was the name of the same mineral as our Topaz it cannot be with certainty affirmed.

Tavernier gives a view of a magnificent Topaz in the possession of the Great Mogul. It is beautifully cut, its girdle being a perfect octagon. "This," says he, "is the only gem I have seen him wear upon his person

whenever I visited his Court during my last journey to the Indies. It weighs one hundred and fifty-seven and a quarter carats, and was bought for this monarch at Goa for 181,000 rupees, (\$543,000.)"

A Topaz valued at 10,000 roubles is among the Jewels in one of the saddles of Catharine II of Russia.

Albertus Magnus says that this stone is more beautiful in the morning than at any other times of the day. And is this not true of every thing, animate or inanimate ?

Cardanus says that with a simple powder of Topaz diffused in wine, he cured one Cesar Palavicinus, Esq., of a fever that he had had for fifteen days, and another gentleman of "melancholy," who had long been dosed in vain by the prescriptions of the regular practitioners.

Thomas Nicols calls it "a very hard glorious sun-shine gemm."

He also says: "The powder of it is said to be good in asthmatick passions, and in the *orthopnoea* if it be drunk in a convenient liquor. If in fevers it be held under the tongue it is said to quench thirst.

It is cold and dry as all other pretious stones are."

The Emerald is a composition of silica, alumina, and glucina, coloured generally green by chrome oxide. It is of various shades of green, sometimes colourless, sometimes inclining to blue and yellow. Those species not green however are specifically known as beryl or aqua-marine—the colouring matter in them being iron peroxide. Emeralds are found in the shape of six-sided prisms, with the lateral faces smooth, and varying from transparent to translucent. It is not affected by acids. It is found chiefly in Peru. Less beautiful varieties are met with in India, Ceylon, Greenland, and Siberia. It is cut in various forms, the Brilliant, the Rose, and the Table styles. It is usually set with a green substance behind it, unless of very fine quality, when they are open-set. They sell at the price of \$12 per carat. One of twenty-four grains, at the auction of the Marquis de Dreé, sold for 2,400 francs. It may be very successfully imitated.

Anciently there were mines of it wrought in Egypt on the Arabian Gulf. For some centuries all knowledge of them was lost, but they have been rediscovered, in modern days, by Caillard.

Tavernier has some remarks on this stone, which, as bearing on the early history of America, are worth translating in full.

He first expresses the opinion, that the Emerald, though known from time immemorial, always came from America. He then adds, "I believe, that, prior to the discovery of that part of the world, commonly called the West Indies, Emeralds were in-

* Manual of Mineralogy, or the Natural History of the Mineral Kingdom. By James Nicol, F. R. S. E., F. G. S. Edinburgh : 1849.

deed brought into Europe from Asia, but that their actual source was the kingdom of Peru. For the Americans, before they became known to us, traded in the Philippine Isles, whither they carried gold and silver, especially the latter. The same traffic is still continued, and the Peruvians visit the Philippines yearly with two or three vessels carrying silver and rough Emeralds. Here they are met by traders from Bengal, Arakan, Pegu, Goa and other places, bringing cloths of all sorts, set Diamonds and Rubies, gold-jewelry, silk-stuffs and Persian carpets. It should, however, be remarked, that they are not permitted to deal directly with the Americans, but only through the intervention of persons residing at the Manillas. And this is the only way in which Emeralds reached Europe before the discovery of the West Indies."

The Spanish conquerors of Peru heard that, in the Valley of Manta, was a temple dedicated to the Goddess, Emerald. Of course they hastened to pay their devoirs at the shrine of so respectable a divinity. But, on reaching the temple, they found that the Goddess had disappeared. However, finding there a large number of daughters of the "Mother of the Emeralds," (as the Goddess was entitled by the priests,) they took possession of these for their own behoof.

The Mexican kings prized these stones so highly, that they were accustomed to pierce their nostrils and there hang one of the finest specimens they could procure. They put them also upon the faces of their idols.

If we may credit an old writer, the traffic in them from America must, at one time, have been enormous. For he says, that in the fleet, which came from the Indies, in the year 1587, there were two great chests of Emeralds. If this be fact, the number in circulation must, we think, have diminished.

Highly as these stones have ever been prized by Europeans, it would seem that the Orientals have valued them more highly still. For Tavernier says, that, in his day, Emeralds, and indeed nearly all the precious stones, except the Diamond, brought better prices in Asia than in Europe.

This stone is especially noted for the extravagant traditions of all kinds concerning it.

Thus it is gravely recorded, that the victorious Saracens captured, at the Spanish city, Toledo, a table three hundred and sixty feet long, constructed of a single Emerald! Also that an obelisk stood there, composed of four Emeralds only, which was sixty feet high! It is stated also that in the Cathedral treasury of Genoa was preserved, in 1780, a hexagonal bowl of Emerald, of which the broadest diameter was fourteen and a half inches. In 1319 this bowl was pledged

to a certain cardinal for 1200 gold marks, and twelve years elapsed before the city could raise this sum for its redemption. In 1726 a volume was published in Genoa, which professed to demonstrate by authorities, that this identical vessel had once belonged to King Solomon, and was an item of the presents brought to him by the Queen of Sheba.

It must be confessed, that it is rather a sorry downfall of the romance concerning this stone to find it more than probable, that all these large specimens are neither more nor less than green glass, or at best but rock-crystal, imbedded perhaps with portions of aqua-marine. For it is stated that in Peru, which yields the finest in the world, no one larger than an ostrich's egg has ever been mentioned, and that such a one ever existed is extremely doubtful.

In Saint John's Apocalypse (chapter iv, 3 v,) the throne of the Deity is described as surrounded by a rainbow of Emeralds.

Tradition says that the famous magician Hermes Trismegistus engraved on an Emerald a panacea for all human maladies, which was enclosed with his body in his tomb. Rather a selfish proceeding it seems to us.

As a fact belonging to modern times, we would mention that the sceptre of Poland was a simple piece of beryl, two feet long. It has been broken in the middle, and is now in the possession of Russia.

M'r Hope, of London, possessed a cut crystal of the beryl class, weighing six ounces, and valued at £500; and the Duke of Devonshire another from Peru, two inches long, and weighing eight oz. eighteen dwts, but containing many flaws, and valued at one hundred and fifty guineas.

In the "Memoires du Règne de Catharine, Impératrice de Russie" mention is made of an Emerald, belonging to the Crown, of the size of a hen's egg.

Martinus Rulandus says that the Emerald exceeds in verdure watered grass, or the greenest leaves of the trees.

Avenzoar declares it to be a specific against poisons, and Boëtius gives a recipe for a "tincture of Emerald."

D'r Aloysius Mundella says that his brother, a Jeweler, sold an Emerald for one hundred and thirteen *aureos* to Franciscus Maria, Prince of Urbino, and intended by him to be used medicinally.

Cardanus says that all green jewels may be affected by the fire on account of the abundance of humour contained in them! (*De lapidis pretiosis.* Book 7.)

Baccius says, speaking of the beryl specimen, that if wrapped in a linen cloth and put into water, or put into water by itself, the water will seem to be moved. And

Wurtzung, a German physician, says that it is used in all diseases of the heart.

We shall conclude our researches upon this stone with some quaint old passages from our " Sometimes member of Jesus College."

" Sophisticatours are wont, *lucri causâ*, to adulterate this gemme."

" The Emerauld is a precious stone or gemme of so excellent a viridity, or spring-colour, as that if a man shall look upon an Emerauld by a pleasant green meadow, it will be more amiable then the meadow, and overcome the meadow's glorie, by the glory of that spring of viriditie which it hath in itself: the largenesse of the meadow it will overcome with the amplitude of its glory, where-with farre above its greatnesse it doth feed the eie: and the virescencie of the meadow it will overcome with the brightnesse of its glory, which in itself seemeth to embrace the glorious viridity of many springs. This stone is known by its apparent coldnesse in the mouth, and by its gravity being weighed."

" They do much sharpen and acuate the dulnesse of the sight, and therefore engravers will most willingly be employed about them. They are very transparent, and do very excellently dart forth their rayes like lightning; and therefore they are of great esteem and price."

" The Scythian Emerauld is found in gold mines, and cannot be obtained without a great deal of danger: for it is reported, that the Gryphines take charge of this, stand century about it, and have their safe custody upon it. These fierce ravenous birds make their nests in the mines of gold where these pretious gemms are to be had, therefore the *Arimaspi*, or *Monoculi*, who hunger much after the gold, and Emeraulds, are forced to arm themselves for a battell with these birds, before they can obtain their prize."

" This stone is good to recreate the sight; Andreas Baccius, Agricola, Cardanus, and Anselmus Boëtius say, that there is such an enmity betwixt it, and illegitimate venery, or the uncleannessse of the flesh, as that if it do but touch the skinne of an adulterer, it will break. And that it doth bridle the reins of lasciviousnesse, and much temper it; insomuch as Albertus Magnus doth not doubt to affirm that the king of Hungaria Bela having carnall knowledge of his wife, with an Emerauld set in gold on his finger, the Emerauld brake into three parts."

The Amethyst, which has been known from the earliest days of Greece and Rome, and was also employed for sacerdotal purposes among the Jews, is also a species of the extensive genus, quartz. The highly transparent, colourless varieties of quartz go by the name of rock-crystals. The finest Amethysts are found in the cavities of rocks in

Dauphine, Switzerland, Tyrol, the Pyrenees, Hungary, Siberia, Brazil, Madagascar, Ceylon, India and Persia.

The Amethyst comprises the violet-blue varieties of quartz, generally crystallized as pyramids on the exterior of rocks. The uniting planes of the prismatic portions are frequently marked by undulating lines, and all specimens, thus arranged, are now termed Amethysts. This stone varies from transparent to translucent; is of a vitreous lustre; and on the same specimen is often a dark-violet and nearly colourless. It scratches white glass, strikes fire with steel, but yields to the file. Under the compound blowpipe it parts with its colour. The blue colour of this stone is believed to be caused by peroxide of iron. The German chemist, Heintz, found a very dark-tinted Brazilian Amethyst become colourless, when subjected to 250° of heat, and, as it contained, at most, only 0.01 per cent. of manganese, he decided that the latter could not be the colouring principle. From various other experiments he concluded, that organic matter could not produce the colour, but that, most probably, it was owing to the peroxide of iron.

The finest violet Amethysts come from Siberia, Persia, India and Ceylon. The Scottish Highlands were formerly distinguished for producing the cairngorm, a highly prized brown or yellow species.

It is sometimes cut in the form of a Brilliant, and, when set, is supplied with a blue or red foil, in case it is pale, but, when deep-coloured, it requires no artificial assistance. Though used in almost all descriptions of Jewelry, it shows best in necklaces.

The Amethyst is no longer prized so highly as once. And yet, when large-sized and intense and uniform in colour, it is greatly valued still, and well-cut stones, of one carat, are worth from three to five dollars, and so on in proportion to their bulk and tint.

The Amethyst may be imitated very closely with paste—so closely, that the imitation is distinguished with great difficulty from the real. The artificial gem, however, is somewhat heavier than the genuine, on account of the metallic oxides, which enter into its composition.

Among the ancients this stone was ever a favourite one for purposes of engraving. Several fine specimens of it have come down to our day, such as a bust of Trajan carried by Napoleon from Prussia to Paris during the wars of the Empire; the Apollo Belvidere; the Laocoön Group; the Farnese Hercules, &c..

As with other precious stones, so with this, antique tradition has connected not a few superstitions. Thus its very name,—from the Greek privative, *a*, and *methuo*, to intox-

icate,—was given to it, under the impression that wine, taken from a cup of this material, could not intoxicate.

The Amethyst was the ninth stone in order on the Urim and Thummim, worn on the breast by the Jewish High Priest.

Aristotle says that the Amethyst if worn on the stomach hinders the ascension of vapours; the reason of it he gives to be that it draws the vapours to itself, and thus dissipates them.

Andreas Baccius says (*De Natura Gemmarum*, Chap. XI) that it sharpens the wit, destroys sleep, and resists the effects of poison.

With a quotation from Nicols we will dismiss this stone:

"Pliny, sporting in his naturall History about this stone, saith that it doth draw nigh to the colour of wine, but it durst not tast it, that is, it taketh but very little of it: for before it doth thoroughly relish it, its glory doth end in a very delightfull pleasing sparkling violet colour: the most excellent of them have in them a glorious fiery brightness, which doth most excellently and pleasingly dart its self forth (as I have observed in one which I was once master of) through the transparent cloud of a skie colour; from the mixture of its rednesse, brightness, or fiery splendour with this skie colour, ariseth all the glorious delight of its pleasing tincture."

In proceeding to treat of the minor gems, we deem it proper to put the reader on his guard by observing that our whole subject is made difficult and perplexing by the fact, that various names have been given to the same stone in different times and countries, and that great numbers of them, slightly differenced from each other, belong to the same genus, and even the same species. This remark applies especially to those of which we are now to speak. We shall thread the labyrinth as best we may, though we could wish we had that antique "silken thread" to guide us.

The Carnelian is a species of the calcedony, which is itself a sub-species of that universal mineral, the quartz. To the ancients it was known as the "sarda," for which name two reasons have been assigned, which we will give when we speak of the Sardonyx. The moderns have variously entitled it Carnelian and Cornelian—in either case from its red color, corresponding to the color of the flesh, "caro," and the heart, "cor."

The finest of these stones come from Siberia, Arabia, India, Surinam and Tyrol, though they occur in various other places in both the old and new worlds. It is found in masses or pebbles; is semi-transparent and translucent; and (what somewhat impeaches its name) is, in its varieties, not only blood-

red, but yellow and yellow-brown. The Jewelers prefer the dark-red and the yellow-tinted.

It is used for seals, rings, watch-keys, &c.. Its color is said to be improved by calcination, and it is also said that the ancients boiled it in honey to heighten its color. On account of its hardness, it is very useful for seal-engraving.

In regard to this stone we close by citing an old superstition referred to by Nicols: "It causeth him that weareth it to be of a chearfull heart, free from fear, and nobly audacious, and that it is a good protection for him against witchcrafts and fascinations, and putrefactions of humors."

From the best information we can obtain, Carbuncle was the ancient name for the now entitled in geological treatises spinelle, which latter, according to Haüy, is the true Ruby. As we have already described the Ruby, we need not, of course, repeat ourselves, but consider that our list of precious stones, which made the Carbuncle and the Ruby two different gems, was erroneous.

Garnets, or Granats, according to quaint old Nicols, were well known to the ancients, who considered them as a species of Carbuncles, otherwise of Rubies. They are pellucid, crystallized chiefly in dodecahedral forms, imperfectly lamellar in structure, more or less conchoidal in fracture, and take their name some suppose from being found chiefly in grains.

The Garnet is of three principal species:

1st. The Syrian, of a deep rose color, "like unto the flowers of pomegranates," says Nicols. "Boetius," continues he, "saith that it looketh like a flame of fire, &c.."

2nd. The Bohemian or Ceylonese, wine-red or nearly orange-yellow.

3rd. The Vermicille, deeply tinged with orange-yellow.

The red Garnet is found in many species of rocks, in loose crystals, in small boulders, in grains, and in alluvial earth. It occurs in many European countries and in various parts of the United States.

The grains collected by digging and washing alluvion are preferred by lapidaries to all others.

The chemical constituents of this gem are silica, alumina, and the protoxides of iron and manganese.

Garnets are much used in Jewelry, being cut into rings, breastpins, ear-rings and necklaces, and out of the larger ones snuff-boxes are sometimes made.

Their value is measured by their size, purity and color. A Syrian Garnet, eight and a half lines long and six and a half broad, was sold at the auction of the Marquis de

Dree for 3,550 francs, and a red Ceylonese Garnet, eleven lines long and seven broad, was sold for 1,003 francs. They can be very well imitated by pastes.

As one of the Latin names of this stone, or of the Ruby, or of both, is Rubinus, it formerly was often called Rubine in English. This explains the meaning of Rubine in the following quotation from Nicols, with which we close.

"Plinie relateth of the Ethiopians that they have a way of quickning obscure and dull Rubines, so as that they will make them to discover their splendour and nitour for fourteen moneths together, even like a flaming coal; and that is by macerating of them for fourteen dayes in vineger: but by this means, though their glory be increased for a time, they are made softer, and more subject to a brittle and fragile condition."

The Onyx is one variety of the species of mineral substance called calcedony, and is the stone of which those exquisite artistic products, the antique Cameos, were made, and although cheaper substances, and more easily to be wrought upon, are used chiefly at the present day for the production of these works of Art, the Onyx is still extensively employed. The peculiarity which fits it for this branch of Art is its composition of different coloured strata, of which the artist takes advantage in fashioning figures in relief on and out of the stone. If there are two strata, a figure, or a series of them, is engraved out of the one, and the rest of it is cut away, until the other stratum appears as a ground for the subject engraved. If there are three strata, two figures may be engraved, the one most prominent and the back ground being of the same colour—the intermediate one being of a different hue.

The colours of the different layers of the Onyx are black, (or dark,) and white.

The principal supply of this stone now comes from Oberstein, in Prussian Saxony, though some are furnished both by the East Indies and Brazil.

As good specimens of these stones are scarce, it has become common even in Saxony to stain in imitation of it common uncolored specimens of calcedony. This mineral in all its varieties consists of strata of different degrees of density, though oftener all of the same colour—a nebulous milky gray. It will absorb fluids in the direction of the strata, which, on account of the diversity of their structure, will, though all be gray, if the whole stone be dyed with one material, present tints widely marked in hue. This is a business extensively carried on at the towns of Oberstein and Idar.

The Onyx itself is treated also chemically at these places, to increase the contrast between its white and dark layers. This is effected principally by sulphuric acid.

These imitations, as well as the Onyx itself, are very hard and expensive to engrave; a cheaper and softer material was therefore sought and found in shells, and of this substance are made the greater proportion of Cameos we now meet with. Among the shells fitted for the purpose is the "Bull's Mouth," from Ceylon and Madagascar, having a red inner coat; the "Black Helmet," from Jamaica, Nassau, and New Providence, having a blackish inner coat; and the "Queen Conch," having a pink coat. The "Black Helmet" is the largest, a single shell often furnishing two or three Cameos of the size usually adopted for breast-pins. All these shells have three several layers, deposited successively by the secretion of the mollusc, white forming its calcareous domicil. The substance was introduced in the manufacture of Cameos in Sicily, only about fifty years ago. It was restricted to that island and the Italian peninsula for about twenty years, but, an emigrant Italian then commencing the manufacture in Paris, that city has since been the head quarters of the Art.

A still cheaper material for Cameos has been found in glass. It is prepared by cementing together two layers of different colours. The figures are cut upon the glass in the same manner that all cut-glass ware is decorated. If done carefully they look extremely well.

But to revert to the Onyx itself—it is a stone known from the earliest times. The Bible calls it the "Stone of Stones," and in China it is said to be reserved for the Emperor exclusively.

The name of this stone is derived from a Greek word, identical in its spelling, signifying the finger-nail, a derivation which, (if the word was then as now applied only to those specimens of calcedony formed of white and black streaks,) would seem to indicate that this God-like race were accustomed to wear theirs in mourning!

In the Green Vault at Dresden is an Onyx valued on account of its clearness, and reckoned to be worth forty-eight thousand thalers. It is regarded as one of the principal curiosities in this collection. There is a very slight flaw in it, but the artists dared not cut it deeper, under the apprehension that, though they might thus make it a perfect gem, they might also make the original imperfection more perceptible. It is about three inches long, and of nearly the same width.

Dioscorides says that, if worn about the neck as an amulet, it will excite the passions, and stir up strife, and that it will serve as a preventive against epileptic fits.

Appianus says that Mithridates, King of Poutus, had two thousand cups made of this stone among his household treasures.

Thomas Nicols, speaking of the calcedonies, says that its "chiefest use is in seals; for it sealeth freely, without any devouring of the wax."

Baccius says that it drives away evil spirits, is good against melancholy, and will ensure victory to the bearer of it.

Both the Greeks and the Romans carried the Art of Cameo, as well as Intaglio, engraving, to the highest pitch of perfection, and the Italians, as successors to the latter, are at the present day the most skilful cutters existing. Between the best antique and modern Cameos it is exceedingly difficult, if not impossible, to tell the difference, and even the greatest connoisseurs are at fault.

The Apotheosis of Augustus is a celebrated historical Cameo, of very large diameter, comprising four layers, two white and two brown, which are skilfully turned to account. It is not within our limits however to give individual descriptions of celebrated Cameos, as they exist in so great numbers, but the reader may refer with much pleasure and profit to the work, whose title is given in the note at the foot of this column.* Here are two quarto volumes, the whole of the first and the half of the second of which consist of descriptions of all the best engravings upon stones that have ever been executed. The remainder of the second volume is occupied with well executed drawings of the most prominent subjects described. Some are very beautiful—some are very curious.

It may be asked what peculiar force is contained in the word Cameo, when the expression, relieve engraving, seems to cover the whole ground. The answer is that the word Cameo, whatever may have been the origin of the word, implies now not only a figure in relief, but that the ground upon which it rests is of a different colour from the figure itself. A Medallion is in no case a Cameo, nor would an artificial colouring of any portion of it render it so—the diversity of tints of the Cameo, it is understood, must be natural, or at least an imitation of some natural production.

Intaglio is the term used to express an engraving sunk below the surface of the stone, as is required for a seal, in order to re-produce the subject in relief in impressions upon wax.

The Sardonyx is a stone of the same species as the Onyx, and differs from it only in this, that its layers instead of being black and white, are pink, (or red,) and white. It

is found in the same localities and is used for precisely identical purposes. The name is formed from the two words, *sardius*, applied by the ancients to the Carnelian, on account of its similarity of hue to the flesh of a fish of the same name, or because found in Sardinia, and *onyx*, the finger-nail—the whole signifying, we suppose, a red and white finger-nail, and so called by way of distinction from black and white streaked specimens of calcedony, which were honored with the generic name of Onyx!

Nicols says: "The China vessels, which are brought into these parts, are supposed to be made of this stone and the fatter part of the earth boyled together."

The Heliotrope is a species of calcedony, and is of a dark-green color, sprinkled with deep-red spots, whence it is sometimes named blood-stone. The name, Heliotrope, comes from two Greek words, *helios* and *tropē*—sun and turning—it having, according to some, been anciently employed for observing the sun.

It occurs in obtuse masses, with translucent edges, and is of a resinous lustre. It is found in Siberia, in the Faroe Islands, in Scotland, in several countries of Asia and Africa, and in some portions of the United States.

It is chiefly employed for sword and dagger hilts, for snuff-boxes, and the ordinary articles of Jewelry. It is much admired. Its price is measured by its number of red spots, a good and large specimen often bringing twenty dollars.

Its red spots, according to mediæval superstition, were owing to the blood of Christ being diffused through it.

Nicols also, according to his wont, has registered some curious superstitions concerning it, which we here cite for the reader.

"It is reported of it, that if it be put into water which is directly opposed to the beams of the Sun, it will make the water boyl, and cause it to be resolved into a cloud, which not long after is dissolved into dropps of rain. And that if it be put into fair water, opposed to the beams of the Sunne, it doth change its beams, and by the repercussion of the aire, seem to shadow the clearnesse of its rayes; and so to induce a sanguineous colour in the aire, as if the Sun, by the interposition of the body of the Moon, did suffar an ecliptick darknesse."

"There is a report, which ariseth of the impiudence of Magicians, that if this gemme be anointed with the juyce of a Marigold, it will cause him that carrieth it to walk invisible. So saith Plinie."

The Chrysolite. The authorities are unusually at odds respecting this stone, so that it is very difficult to make out an unim-

* Catalogue raisonné d'une Collection Générale de Pierres Gravées Antiques et Modernes tant en Creux que Camées, tirées des Cabinets les plus célèbres de l'Europe. Moulées en pâtes de couleurs à l'imitation des pierres, émaux blancs et Soufres par Jacques Tassie, Sculpteur. Mis en ordre, et le texte rédigé par R. E. Raspe. Orné de planches gravées, etc.. 2 Tomes, 4to. A Londres. 1791.

peachable description of it. The name is significant enough, "golden, or gold stone."

It would seem there are several varieties of this gem, the two principal of which are called the Chrysolite, par excellence, and the olivine-species—the former embracing all fine, green-colored and crystallized varieties—the latter all less pellucid and inferior-colored species. The Chrysolite comes principally through Constantinople from some region unknown, though occasionally also from Brazil.

The olivine specimens are found in several countries of Germany, in many parts of Scotland, in Russia, Siberia, South America, and in a few of the States of our Union. It occurs chiefly in basalt, but also in some lavas, and in several species of rock. It is rarely, though occasionally crystallized. Fine large specimens are not unfrequently found, and this stone, though of indifferent color, from its taking a high polish, is sometimes sold for considerable sums. Two were vended in Paris at 600 francs each.

The largest specimen known weighs sixteen pounds. It was found in Minas Novas, and is in possession of the Brazilian Crown.

Both these species of the Chrysolite are used for ornament, though not to any great extent.

It will be remembered that this is one of the stones in John's description of the New Jerusalem.

Nicols says:

"It is of such excellent faculties, as that it is said of it, that it freeth men from passions, and from sadness of the mind. And that if it be cast into scalding hot or boylung water, it doth so asswage in a wonderfull manner, and so in an instant, and of a sudden astonish and stupifie its heat and fervour, as that it straight taketh away all its boylung, and its heat, and a man may in that very instant in which it was put in, put his hand without any hurt or danger into that water which even now with the fervency of heat boyled up. For this cause it is thought to be a very excellent remedy for the mitigating of choler and of choleric passions. It is reported of it that it doth drive away nocturnal fears; and that it is a very effectual amulet against choleric distempers of the brain."

Authours do say of it, that if it be put upon a table where poysen is or venome is left, it will straight-way fail of its splendour, and loose its glory, and so soon as the poysen or venome is taken away, it will recover all its glory again; wonderfull is this also which is reported of this stone, namely, that it doth increase and decrease in its strength of powers and faculties, according to the increase and decrease of the Moon."

The Hyacinth. Writers differ about the

identity of this stone, as about so many others. We suspect the cause of these differences is chiefly, that they are speaking about varieties of the same stone. Without essaying the difficult and protracted task of reconciling their discrepancies, we shall take for our main authority, the latest, and, in our view, the ablest of these writers, James Nicol. He holds the Hyacinth to be identical with the "zircon."

This stone occurs in imbedded crystals, chiefly prismatic or pyramidal, and in rounded grains. It is in its several species not only red, but gray, yellow, green, and colorless.

It is most abundant in the sienite of Southern Norway and in the miascite of the Ural Mountains. It abounds in numerous parts of Europe, as also of North America.

The colorless varieties are often sold for Diamonds. The specific name Hyacinth, is more particularly appropriated to the most brilliantly colored ones, which are rarely of large size. The "hyacinthus" of the ancients is believed by scientific writers to have been a different stone.

Nicols of course has some traditions about it.

"One of these Cardanus saith he was wont to wear about him, to the intent of procuring sleep; to which purpose he saith it did seem somewhat to conferre, but not much."

"Cardanus in his book *de lapidibus pretiosis*, saith, that it is endued with a power and facultie of procuring sleep, of chearing the heart, of driving away plagues, of securing from thunder, and of increasing riches, honour, and wisdome, &c., being worn in a ring on the finger, or about the neck as an amulet."

The Cat's-eye. This stone takes its name from the peculiar play of light on its surface, whereby it variously appears greenish-white or gray, olive-green, red, brown or yellow. It contains parallel fibres, resembling those of amianthus or mountain-flax. The finest come from Ceylon and Malabar, but it is also found in the Hartz Mountains, in Bavaria, and in several of the United States.

It is a species of the universal quartz, and is found, never larger than a hazel nut, in the fragments of boulders and gangs. It is valued according to the size, color and play of light. In the Imperial Cabinet at Vienna a Cat's-eye, five inches long, and of a yellowish-brown color, is preserved.

Some of the ancients called this stone "oculus solis," or eye of the sun, and the Persians named it "mithrax," the sun. This stone is, at the present day, a great favourite in China, and commands a high price there.

Nicols has his tradition concerning it.

"This stone is greatly esteemed amongst

the Indians, because they are perswaded of the devill, that he that weareth it cannot want riches: and for this cause that which in Lusitania is sold for 90 aurei, is amongst the Indians esteemed worth 600 aurei. It is usually of the same price and esteem with the Opalus."

The beautiful and popular stone called the Opal is next in our order. We shall open our description of this favorite gem with our excellent old friend Nicols's rhapsodic outburst. "The Opalus is a pretious stone, which hath in it the bright, fiery flame of a Carbuncle, the pure, resfulgent purple of an Amethyst, and a whole sea of the Emerald's spring glory, or virescence, and every one of them shining with an incredible mixture, and very much pleasure." To our excellent friend's account we must add that the finest species of this stone emit also the yellow of the Topaz and the blue of the Sapphire. It is, in one word, a natural prism, which, like the soap bubble or the three cornered glass, decompounds the sunbeam into its elements. About the cause of this decomposition "doctors disagree." Brewster's theory seems the most plausible, viz. that this cause is the existence of fissures and cracks in the interior of the mass.

Professor Nicol notices nine varieties of this gem, all possessing more or fewer of the same general characteristics. Our space will permit our touching on but one. We may premise, that the name is derived from the Greek "ōps," eye—the Greeks, who highly valued the stone, believing it to have the power of strengthening the eye. We may add here, to save a fresh reference, that the Greeks fancied it had the effect to conciliate universal good will to its possessor, and therefore named it also "paiderōs," i. e. love of children. In the Apocalypse, Saint John compares the Celestial City, as a whole, to an Opal, as exhibiting all colors at once.

The finest of the Opal species is called the precious or noble Opal. Nicols names various parts of the East as producing it. Recent writers contradict him and say that Hungary, Saxony, the Faroe Islands, and South America are its native localities. It is found in small gangs and nests of the volcanic porphyry formation.

This gem is used for rings, necklaces and diadems—the smaller specimens for mounting snuff-boxes, rings, &c.. It still stands in very high estimation, though probably not so high as among the Romans, in whose day it was said, that Nonius, a Roman Senator, chose banishment rather than surrender a splendid Opal to Mark Anthony. Its present estimation may be judged from the fact that a single large Opal was lately sold in Europe for 150,000 dollars. This gem has never yet been imitated.

The Imperial Mineralogical Cabinet at

Vienna contains a precious Opal weighing seventeen ounces; and among the French Jewels is a cloak-clasp mounted with an Opal, valued at 37,500 francs. It is surrounded with 197 other Brilliants.

Of the other eight species of this stone we will not here speak, since some idea of them may be gotten from the above description.

We cannot better close, than by a touch from our friend Nicols on the "virtues of this stone."

"It is reported of this stone, that it sharpeneth the sight of the possessours of it, and cloudeth the eyes of those that stand about him, so that they can either not see, or not mind what is done before them: for this cause it is asserted to be a safe patron of thieves and thefts; as it is related in *Lapidario*."

The Pearl has always ranked very high among the ornamental stones, though far less costly than many of the others. It has been a special favorite with the ladies—more particularly with the young ladies—from time immemorial. It would be a sufficient evidence of this fact, if we even possessed no other, that it has passed into a figure of speech to typify whatever is peculiarly pure and precious. The "pearl of great price" is one of the most sacred proverbs of our language. "My pearl of beauty," as all readers of oriental literature are aware, is a common title applied to a loved one, by the poets and the poetic feeling of Persia and Hindostan. And, indeed, there is an aspect of purity, chasteness and sweetness in this gem, when employed in the decoration of a lovely female, which is lacking in other gems of far more imposing appearance.

But, as, according to the Napoleonic adage, "there is but a step from the sublime to the ridiculous"—as, according to a second anonymous proverb, "extremes meet"—and as, according to Pope, "whatever is, is right"—"in erring Reason's spite"—this beautiful, pure and most valued gem is declared, by the savants, to be a diseased or purulent secretion of an animal, standing or lying, in the scale of existences, as nigh to the vegetable or the mineral, as it well could do without a complete identification with the same. This animal is a species of oyster, which, unlike its luscious synonym, is perfectly inedible, and would seem constituted, so far as we can judge, to get wounded, to suffer a seven years' malady, and then die for the purpose of embellishing the ear, the neck, the bosom, or the wrist of those who are distractingly charming already!

The sounder opinion of the origin seems to be, that some minute substance, such, for example, as a grain of sand, having got lodged within the shell of the creature, produces irritation, like a pebble within one's

boot, and unable to "out with it," the tormented animal makes the best of a bad master by covering it with a calcareous excretion from its own substance. It was once fancied, that some external injury was essential to the production of the Pearl, but an experiment, suggested by the celebrated Linnæus, to pierce small holes in the shell of this oyster and then restore it to its original bed, proved unsuccessful. The Chinese, however, are reported to have succeeded in something like this experiment. They thread upon fine silk small beads of Mother of Pearl, and introduce them into the shells of these animals, where they are speedily covered with a calcareous secretion, which converts them into veritable Pearls. The ancients poetically described these gems as drops of dew falling into the shells, when the animals rise to the surface in the month of May, and becoming transmuted into Pearls by some unexplainable action of the sun's rays.

Pearl fisheries exist in various portions of the globe, though at present the most productive are those off the island of Ceylon, on the coast of Coromandel and in the Persian Gulf. The Romans, it is said, found Pearls in Britain two thousand years ago, and in modern times the Scotish rivers have supplied considerable quantities, though not of the finest quality. Several German rivers and two or three Russian provinces also furnish them, as do likewise the Bay of Panama and the coast of Colombia, in this Western hemisphere, though the last-named are pronounced inferior to those of the Orient.

Ceylon, however, would seem to be the principal present fishery for this species of gem. The scene presented at the time, which embraces the months of April and May, is described as being very striking. One hundred and fifty thousand people are assembled here from all quarters of the East, and are lodged in huts on the sea-shore, composed of a few poles stuck in the ground, interwoven with bamboo and covered with the leaves of the cocoa-nut palm. Of course this number of men occupy a large fleet of boats, each of which carries a captain, a pilot, and twenty men, of which last ten are experienced divers. Five of these descend at once, each carrying a net or basket to contain the mussels, together with a strong knife for detaching them, as also for defence against the sharks. These divers remain under water from fifty seconds up to two minutes. They are able to make forty or fifty plunges in a day, and to bring up, on each occasion, about one hundred oysters.

Each boat-owner has a shallow pit fenced round, in which his oysters are stored and allowed to putrefy under a burning sun. When thoroughly dried, they are drenched in sea-water, after which they are easily

opened and render their pearly contents. The Pearl is not attached to the shell but is loose within it. The finest Pearls are perfectly globular, white, radiant, and seemingly translucent without being actually so.

In order to clean, round and polish the Pearls to the state in which we see them, a powder is employed, which is made of the Pearls themselves.

Mother of Pearl is the interior, silvery layer of various shells, especially those of oysters abounding in the East Indian Seas, and is so valuable as to be employed for various purposes of manufacture. The beautiful tints of this substance are owing to its surface being covered with minute grooves, which decompose the reflected light of the sun. Sir David Brewster is said to have first discovered this structure of the shell. These grooves are often so small, that, as seen by the microscope, three thousand of them are comprised within a single inch.

The art of making artificial Pearls has, by the Parisian manufacturers, been brought to such perfection, that even professional dealers cannot, in all cases, distinguish between the real and the imitative. This art originated with a French bead-maker, named Jasmin, who noticed that a certain small fish, when washed, deposited fine, silver-colored particles in the water. These particles he found to possess much of the lustre of Pearls, and, having made small beads of gypsum, and covered them with this substance, he found them greatly admired and sought after. With certain alterations, suggested by the ladies themselves, he raised this manufacture into a lucrative business. Four thousand of these fishes are required to supply one ounce of these Pearl-manufacturing scales, and it was discovered, eventually, that they might be preserved from putrefaction by immersion in a solution of ammonia.

Tavernier gives us engravings of the large Pearls he saw in his travels.

First he describes one "belonging to the King of Persia, bought in 1633 from an Arab, for 32,000 tomans, (about \$280,000.) It is the largest Pearl ever discovered, and is without a single defect. It is of a perfect pear-shape."

"N'o 2," he says, "represents the largest Pearl I saw at the Court of the Great Mogul. It hangs from the neck of a peacock made of precious stones, and comes down upon its breast. The peacock surmounts the great throne. It is of a pear-shape."

The next, of the same shape, and weighing fifty-five carats, was sold by Tavernier to Shah Est Khan, Uncle of the Great Mogul, Governor of Bengal. It was of fine water, and came from the West Indian Fisheries.

"N'o 4 is olive-shaped. It was of fine

quality, and was in the midst of a chain of Emeralds and Rubies, worn sometimes by the Great Mogul about his neck."

"No 5," says our traveller, "is the largest round Pearl I have ever known. It is in possession of the Great Mogul, but, because its match has never been found, it is not used. If its fellow should ever be obtained, they would be worn as ear-rings, each Pearl between two Rubies or two Emeralds, according to the custom of this country. For here every one, whatever his means, wears at each ear a Pearl between two colored stones."

Another one is thus referred to by him:—"Imenheet, Prince of Mascaté, which name he Arabian Aceph Ben Ali, Prince of Nore-nuaé, assumed when he took from the Portuguese the Province of Mascaté, the best part of Arabia Felix, possesses the most beautiful Pearl in the world, not remarkable for its size, for it weighs only twelve and one-sixteenth carats, nor for its rotundity, but for its transparency, being so clear that the daylight almost shines through it. The Khan of Ormus, wishing to present it to the King of Persia, offered 2,000 tomans (\$18,000) for it, and the Great Mogul sent an envoy offering 40,000 crowns for it, but the Arab refused to sell it."

"The History of Jewels," before quoted, thus describes the discovery of the West India Pearl fisheries:

"This Island Cubagua was discovered by that famous Genouese Christopher Columbus, who having perceived a small boat with some fishers in it, and a woman who had three rows of fair Pearl about her neck, said to his companions, that he thanked God he had now discovered the most rich countrey in the world. He broke an earthen plate of divers colours, and for a piece or two of it this woman gave him very willingly a row of these Pearls, and for another plate he received many others, and learned of the Indians the place and manner of their fishing for Pearls."

To the Pearl, swallowed, according to history, by Cleopatra, Pliny attributes the value of a province. The Emperor Charles V lost one as large as a pigeon's egg. In Spain there is a statue of the Blessed Virgin, wearing a garb, completely covered with Pearls.

The Pearls belonging to the French Crown, now exposed in the Exhibition at Paris, consist of fifteen rows, and numbers of them are described as of the size of a small bird's egg, and of incomparable purity and whiteness.

For a long time a cosmetic for women was prepared from "Mother of Pearl," and the Pearl itself was employed as a medicine.

Our old friend Nicols says that Pearls worn upon the person are good for the sight.

We shall conclude our remarks upon the

Pearl by translating another paragraph from Tavernier.

"Pearls are white, yellow, black, and lead-colored—the first being most esteemed in the East. In fine, the Orientals have pretty much our own tastes in regard to whiteness. I have always remarked that they prefer the whitest Pearls, the whitest Diamonds, the whitest bread, and the whitest women."

The Turquoise. The name of this gem is supposed to be derived from Turkey, the country whose merchants first brought it into the Western markets. Persia seems to have been the country where it was earliest found. But it has since been discovered in Khorassan, Bucharria, and the Syrian Desert. Its lustre is dull or waxy, and its colors are, variously, sky-blue, greenish-blue, occasionally apple-green, and sometimes yellowish. This is the genuine or Oriental Turquoise. It is found on small gangs of bog-ore, in siliceous shiste, in boulders, &c..

There is another stone called Turquoise—generally Occidental Turquoise—which Professor Nicol treats as rather an imitation, than a genuine Turquoise. It is supposed to consist of fossil, antediluvian teeth, colored by hydrated copper-oxide or phosphate of iron. The principal localities of this are certain portions of Siberia and France. Its color is light-blue, or dark-blue, or bluish-green. It is easily distinguished from the Oriental species by being internally foliated and streaked—a fact indicating a bony composition—and by its not taking so high a polish. The blue specimens often turn pale or green with age, but their colour may frequently be restored by scraping them and putting them in hot ashes, and then subjecting them to a new polish. MM. Duhamel and Guettard proved many years ago that the bones of animals could be coloured by making them eat madder.

The Oriental Turquoise takes a fine polish and is so highly valued in the East, as an ornamental stone, that the Persian Shah retains the best specimens for his own use.

Both kinds are used for numerous purposes in Jewelry, such as for rings, brooches, &c., as also for mounting other precious gems.

The price of the Turquoise has greatly fallen within the last ten years. The Oriental is generally four times higher than that of the Occidental, one of pea-size being worth about five dollars.

There is said to be a Jeweler in Moscow, who possesses a Turquoise two inches long, formerly belonging to Nadir, the Shah of Persia, who wore it as an amulet. He values it at 5,000 roubles.

In the Museum of the Imperial Academy at Moscow is a Turquoise more than three

inches long and one inch broad. And among the Imperial Treasures at Moscow is a throne covered with gold and studded with two thousand Turquoises.

The Turquoise has long been employed as a medicine—probably under the impulse of the same notions, which are embodied in the following extract from Nicols, with which we close :

" As that if it be worn in a ring of gold it will preserve men from falls, and from the bruises proceeding of them, by receiving that harm into itself which otherwise would fall upon the man: yet these vertues are said not to be in this gemm except the gemm be received of gift.

It is likewise said to take away all enmity and to reconcile man and wife.

Rueus saith that he saw a Turchoys which upon the death of its master lost all its beauty and contracted a cleft, which a certain man afterwards buying at an under price returned again to its former glory and beauty, as if saith he, by a certain sense it had perceived itself to have found a new master. The same author saith of it, that it doth change, grow pale, and destitute of its native color, if he that weareth it do at any time grow infirm or weak; and again upon the recovery of its master, that it doth recover its own lovely beauty which ariseth of the temperament of its own naturall heat, and becometh ceruleous like a serene heaven.

This stone is very delightfull to the eye, and is thought much to strengthen the sight, because it doth not by its over brightness too much dissipate the visive faculty, nor by its overmuch obscureness too much concentrate the visive faculty."

We have now gone over the whole ground of the precious stones as we marked it out in our opening pages. The next thing of importance to state is the names of the most celebrated Jewelers of the present day. They are as follows:

First, in Paris : The house of M. Froment-Meurice. The founder of the reputation of this house lately died, but his son, though young, gives evidence of reaching the very highest rauk in his profession. He has indeed already acquired the name of the modern "Benvenuto." His cups, vases, platters, statuettes, &c., in gold and silver, have the very highest reputation. M. Bapst's name is the most venerable of any in the ranks, and he keeps up a reputation with the best. M. Lemonnier is the most fashionable setter of Diamonds. MM. Marret et Beaugrand have the most comprehensive factory. MM. Marret et Jarry, also celebrated setters of Diamonds. MM. Ouizille et Lemoine, manufacturers of emblems of the various Orders of Chivalry. M. Janvier, whose specialty is the bijou de fantaisie.

And MM. Odot, Rouvenat, Lecointe, and Petitau.

Second, in London : Mess'rs Hunt & Roskell, (late Mess'rs Storr & Mortimer,) are at once the largest and most fashionable manufacturers. Mess'rs R. & S. Garrard & Co. have a high reputation for a classical style of workmanship in gold and silver. Mess'rs J. V. Morel & Co.. Mess'rs Phillips Brothers. Mess'rs S. II. & D. Gass. Mess'rs Henry & Co., famous for their insignia of Knighthood, Masonry, &c.. And Mess'rs John & Frederick Biden, whose specialty is the cutting and setting of stones for seals.

Third, in America : Mess'rs Tiffany & Co. in the city of New York.

Some account of the manufacture of Jewelry is required, we surmise, under so comprehensive a caption as that beneath which we write, and this is a branch of our subject we enter upon with much satisfaction, as it affords us an opportunity of acquitting ourselves in some degree of a load of obligation contracted in our pursuit of materials for this article. We took advantage of a late visit to New York to call at the celebrated manufactory of TIFFANY, with a view of obtaining, ocularly, some information upon the matters interesting our thoughts.

Having broken the ice by the purchase of a trifle in the shop of the establishment, we soon engaged the person in attendance in a general conversation upon the Jeweler's art, which resulted in our being invited to inspect their work-shops. We were passed over to a most intelligent and agreeable person, one of the heads of the establishment indeed, we inferred from his manner and remarks, and, we are in duty bound to acknowledge, that we could not have received more polite or satisfactory attention had we been the purchaser of their great Opal (of which we will speak again), or had we been an old friend or acquaintance, instead of having called there a stranger for the first time that very morning.

Of the many marvels, beauties, ingenuities and scenes of interest that we encountered in our perigrinations through this prodigious hive, we can hope to offer but a faint outline, although everything we beheld is still fresh in our memory.

We were shewn first the rough materials upon which the Jeweler operates ; they were drawn forth from deep recesses in fire-proof vaults, and appeared before our wondering eyes as massive bars of gold, ingots of silver, and handfulls of rough, common looking little stones, which were in reality Diamonds, Rubies, Emeralds, Pearls, and others of the sisterhood of Precious Stones. They were kept in numberless little square paper boxes, and were exhibited to and handled by us, as if we were examining samples.

of seeds at a nursery; and unset Cameos, cut from the Onyx and Sardonyx, bearing mythological and other subjects, were as common in these quarters as coppers in a newsboy's pocket. Pints of glittering particles of gold from California were poured out before us, then more boxes were emptied, revealing beautiful blue Turquoises, or pure and dazzling Amethysts. In these dingy vaults also, and not in the magnificent show-cases, were contained those bits of Jewelry, rings, bracelets, necklaces, &c., whose prices were estimated, singly, by the thousands of dollars.

Having mounted several flights of stairs we were ushered into an immense apartment, revealing a scene of extraordinary industry. Fifty or sixty persons were seated in close proximity at tables or counters around the room, each one intently engaged upon some delicate piece of gold workmanship. Under the most stringent regulations the opportunities of fraud are very great, and it is with a view to have all the operatives act as checks upon one another, that they are placed in this and all similar establishments, whilst at work, in such propinquity. The workmen here however were believed to be remarkably trustworthy, and during many years past, our guide informed us, not more than half a dozen cases of theft or peculation had been discovered; these consisted, we may mention, in a systematic subtraction of their gold filings.

The workmen are all French and German, most of them unacquainted with our language; nor did we observe even any conversation carried on amongst themselves. Each one seemed completely absorbed with some beautiful ring, bracelet or other ornament, upon which he was filing, chasing, soldering, or setting stones. Between each one and his table, beneath its edge, hung a diminutive hammock, which intercepted the least particle of the precious material that fell beneath the file or other instrument; whilst, behind them all, hovering in succession over the shoulders of each, moved their head artist and chief of this department, giving a word of direction here, of explanation or correction there, and an occasional dexterous *coup de main* upon the subjects progressing around him.

Among these artists and artisans were a number of intelligent looking French women, who performed the final polishing of the rough creations of their male companions, thus fitting the articles to contribute to that dazzling display which we had witnessed in the sales-room beneath.

The wages of these men vary from fifteen to forty dollars per week—those of the women from eight to ten dollars.

Before the operatives are seen lathes, dies, furnaces, cutting and stamping machines,

circular saws, blow-pipes, borax, pumice-stone, solder, pans of aquafortis, box-wood sawdust, &c., &c.. The designs upon the dies are of endless variety, and may be seen in piles around the room. They are themselves of great value.

It is impossible for us to follow through every step the progress of the materials through these persons' hands. All around us are melting, rolling, cutting, and piercing machines, by which the metal is first cut or formed into a shape somewhat approaching that desired. It is then further modelled by innumerable ingenious little instruments, until it is fitted for chasing by hand, or for impression by the desired dies. The precious stones are polished by wonderful machines, using a little oil, and emery, or Diamond dust, and saving a vast amount of human muscle. This work, performed formerly by hand, was so severe as to cripple the operative after about twenty years of labor. A lapidary, who had passed the age of forty without a contraction of the sinews in the wrist, was scarcely to be found.

The workman before us now sets the stones, of course, by hand, files away at his subject briskly but with delicacy, and finally plunges it in an aqua-fortis bath; from this it is transferred to a bed of box-wood saw-dust to be dried. When taken out we are able to discern at this stage what the object is, but it is so dirty and dingy as to be far from attractive in its appearance. It is now passed over to the women to be polished, some of whom, covered with rouge, and other powders used for the operation, present, it must be confessed, rather a grotesque appearance. The ends of their fingers are very peculiar, being broad, bent back, and uncommonly smooth; and no artificial instrument has been found equal to them in imparting a high burnish to a surface of gold. Of these *ouvrières* it may then be literally said that, *La richesse est au bout de leurs doigts.*

The whole of this floor, the fourth, we believe, was occupied in the manner we have described, with the exception of a small office partitioned off.

We mounted another flight of stairs, and found another workshop equally as large as the former, in which a great number of workmen were engaged in fashioning candelabra, and ormolu gas fixings of the most gorgeous description. The artisans here also were principally French. We observed on this floor an immense iron tank, containing several thousand gallons of water, as a precaution against fire. Both this and the room below are lighted by handsome arched windows, fitted with plate-glass.

The manufacture of silverware, in which they have about a hundred men employed, was described to us as very interesting, but

the workshops in this department were in a separate building, not visited by us; this one, immense as it is, having been found inadequate for the full prosecution of the business of this great House.

We retraced our steps to the ground, and in the basement found numbers of men engaged in the reception and packing of cases, this being both the point of entrance and exit of nearly all the materials and wares, used or manufactured in, or exported from, the establishment. The packing of Jewelry the reader might consider could not be an occupation of great extent, but it must be borne in mind that one of the principal branches of business at this establishment is the wholesale supply of Jewelry to all the first class shops in the United States, including those of New York, Boston, and Philadelphia. As it is without a competitor in America in this line, it may be easily imagined how subordinate in extent, interest, and richness are all the other shops of Jewelry, whatever their pretensions, on this side of the Atlantic. Why the value of the stock on hand here, we were informed, is never less in value than a million of dollars!

The appearance of the sales-room on the first floor is of itself worth some description. It is of immense size in length, width, and height. The ceiling and the wall on one side are embellished with skilfully executed fresco paintings, cream-colored, gilt, and crimson, whilst along the surface of the latter are set, equi-distant, half a dozen or more large, oval-topped mirrors. Parallel with this wall, upon walnut wood counters, extend cases for the display of Jewelry. These are six or eight feet long each, and six or eight in number, all silver mounted, and lined with black-velvet. Above each is suspended a handsome chandelier.

Upon the opposite wall you behold a grand show-case, for the exhibition of silver-ware, of immense length, height, and width, fitted with heavy plate glass at the top and on the sides, the sashes being of polished black walnut. This wall contains a number of arched recesses, and at its side, in the centre, a spacious stairway of easy slope, for visitors to ascend to the show-rooms on the second and third floors. Separate stair-cases exist for that perfect army of persons employed about this palace of industry. Down the centre of this room stretches a row of elevated, plate-glass cases in black walnut frames, filled with elaborately wrought wares. In the rear, beneath a spacious skylight, and in a most retired position, are the private offices and those of the Cashier of the establishment. The whole interior is characterized by a chaste and simple richness: and so admirable is the taste presiding over the arrangement and the multifarious con-

tents of this apartment, that you are reminded, by the spectacle, rather of a palace or a museum, than of a mart of traffic.

In this magnificent apartment are to be found specimens of Jewelry which Royalty itself would covet, which are unsurpassed by any in the celebrated *magasins d'orfèvrerie* of Europe, and are far from being equalled by the richest articles contained in the stock of any other establishment in America.

There was, first, a bracelet of chain gold bearing in front a large oval-shaped Opal of the first quality, and the largest in the world in possession of a private individual. Our guide informed us that their House had been five years in treaty for this stone. It was surrounded by sixteen Diamonds of uniform size, weighing about two carats each. To this cluster was suspended a solitary stone, full of fire, of perfect shape, entirely free from defects of any nature, and of the first water. It is the largest perfect Diamond that has ever been brought to this country, weighing nearly eleven carats, and is of such pure water that its first carat is estimated at fifty dollars. The centre cluster and the solitaire Diamond may be detached from the bracelet, so as to be worn, if desired, in a necklace, feronière, or otherwise. The value of this bracelet was of itself a small fortune.

We next examined a necklace, bracelet, ear-rings, and brooch of Pearls and Diamonds, which would have raised powerful emotions in the breasts of some of our fair readers, no doubt. Imagine a necklace of twenty-five, large, perfectly globular, equal sized, bright, and glossy Pearls, and in the centre of them a cluster of superb Diamonds. All the other pieces of this set were in the same style, and the price of the whole was five or six thousand dollars.

We remember a gorgeous bracelet of three bands of gold, covered with a perfect shower of Diamonds, the price of which was between one and two thousand dollars; another necklace at three or four thousand dollars, containing upwards of a hundred Diamonds; another of Pearls, with a Diamond cross attached, at a thousand and some dollars; a bracelet of four rows of closely set Pearls of uniform size, intersected with four rows of Diamonds, at about a thousand dollars; a lady's chatelaine, containing a tiny watch, with a globular Pearl pendant, at a couple of thousands. There was another lady's watch, with Diamonds around the face, and a superb Diamond star in the centre of a green enameled back. A green enameled heart, covered with Diamonds, upon being pressed at the side, opened and revealed a watch half an inch in diameter! Another watch specimen may be worth describing. It was a bracelet of thick hinged gold, fastening with a serpent's head of Diamonds.

The centre piece was a circle of Diamonds, containing the precious little time-keeper; the back was of blue enamel, and either that or the face could be worn exposed to the view.

We saw a thousand dollar necklace of enameled berries and Diamonds; another of two rows of Diamonds intersected with Emeralds; a bracelet consisting of a green enameled serpent, with a head of Diamonds, in which could be distinguished, so exquisite was the workmanship, the teeth and tongue; its eyes were Rubies, and on the top of its head was a Sapphire; another bracelet in the form of a garter of Opals, with a buckle of Diamonds; a breastpin in the form of a butterfly, the back of Opals, the wings of Diamonds, set to shine upon both sides, as the wings were movable; a bracelet of heavy filigree gold, with an oval centre piece, consisting of an Opal surrounded by two rows of Diamonds.

We were much interested in an appeal to our masculine fancy. It was a solid gold cigar case, covered with exquisite enamel of white, green and blue, with six fine miniature landscape paintings of Swiss scenes. They were Lucerne, Berne, the Chapel of William Tell, Chamouni, Geneva and Mount Saint Bernard. Minute as were these paintings, we found them able to bear the strictest scrutiny with a magnifying glass. The top opened with a spring, revealing a watch-face as large as a gold dollar: the watch however may have been an excellent time-keeper, as the movement of it was as large as the top of the cigar case.

An intricate thousand dollar plaything was shewn us in the shape of a gold and blue enameled pistol covered with Diamonds. It was about six inches long, and contained in its stock a watch and a scent box. Upon pulling the trigger the barrel expanded to the form of a bouquet holder.

We now passed to a case containing the Cameos, which were innumerable in variety, among them several antiques set with Pearls and Diamonds, which had belonged to the Crown Jewels of Napoleon. They were obtained abroad of some members of Louis Philippe's family. Those Cameos, cut from stones containing three veins, were exquisitely beautiful; among them we remember one with a black ground, bearing a chariot and a horse perfectly white, and then, in still higher relief, another horse black as jet. This was of large size, and was estimated at one hundred and fifty dollars. Another consisted of a white female head upon a dark ground, and in high relief upon the head a black wreath of flowers. There were innumerable exquisitely cut Madonnas and Cupids, both in the Onyx and Sardonyx, at prices ranging between fifty and a hundred dollars.

Because in our descriptions of many pieces

of workmanship we have stated their value, as nearly as we recollect them, it must not be inferred that we annoyed the person in attendance by asking the price of every article passed in review. A system here prevails which rendered such a proceeding unnecessary. To every object, however costly, however insignificant in value, was attached a label, bearing its price in legible figures. This is a plan which should be adopted in shops for every kind of wares.

A most beautiful flower vase for a centre piece had just been completed. It was supported by four frosted statuettes of solid silver, emblematic of the four elements.

Although what we remember is but a small fraction of all we beheld, we are compelled to forego the description of many things still recalled, for want of space. Let the reader imagine, besides such articles as we have described, gold and enameled card cases and porte-monnaies, set with Diamonds, and bearing watches and miniature paintings, and costing hundreds of dollars; serpent bracelets of finely polished coral; enameled shields, little golden *real* pistols, that could be loaded with powder and fired, and other trinkets set with Diamonds, to be worn upon chatelaines; pins and rings of Diamond flies; perfect ropes of gold for necklaces; and a thousand other forms of Jewelry; and he will then have but a faint idea of the wonders and temptations exposed in this gorgeous temple of Art. It cannot be doubted, we said to ourselves, upon leaving this hall of enchantment, the Arcadie, the land of romance and poetry, is—a Jeweler's shop!

The apartment covering the second floor, of the same size with that beneath, is finished in pure unornamented white, and filled with artistic bronze articles of all kinds, arranged on elaborately carved white-oak tables. These bronzes are all manufactured in Paris, and, outside of that city, no collection of them surpasses in richness and extent that displayed in this immense apartment. They consist of mantel ornaments of every description, artistic figures, single and in groups, of various sizes, vases, clocks, candelabra, candlesticks, lamps, girandoles, ornamental gas-fixtures, &c.. Some of the bronze figures are of life size, and the statuettes seemed to be innumerable. The display of bronzes at the New York Crystal Palace was very fine, as most of our readers are probably aware, of their own knowledge, but it could not have compared in number, variety, or workmanship, with that collection we were now surveying.

For one who lives a life of pleasure we here beheld a most fitting and emblematic marker of the flying hours. It was a playful and most gracefully arranged group in

bronze, consisting of a capering goat attached to and drawing a car, which was surmounted and surrounded by frolicsome Cupids. The wheel next to the spectator served as the dial of a clock. The price of it was three or four hundred dollars. We remember a superb group—Napoleon at the Bridge of Arcole, the value of which was three hundred dollars, and at about half that sum an exquisite classical composition about three feet high—Hector taking leave of Andromache. At about a hundred dollars there was a most admirable and perfect miniature of the famous Arch of Triumph in Paris. We recall too, distinctly, a magnificent and enormous vase supported by two satyrs, surrounded by a Bacchanalian group. But it is impossible to enumerate all the groups of horses, wolves, and other animals, urns covered with figures in relief, tripod inkstands, figures in relief on large medallions, etc., that we here saw in bronze. A great feature in this department was the variety of novel and beautiful contrivances for affording light at night, the or-molu gas-fixtures, Argand burners for gas, with porcelain shades, hall-lamps of painted porcelain, &c.. There was one chandelier fitted with a single enormous globe of ground glass, the whole supported only by flexible chains, through one of which ran a channel for conveying the gas down. This and most of the chandeliers were balanced with weights, so as to be pulled down or elevated at pleasure by a mere touch of the finger. This struck us as a great convenience, and upon expressing some surprise to our cicerone that we had never met with any similar contrivance in Philadelphia, where gas is burned in every house, with scarcely a single exception, he informed us that the Gas Company would not allow the introduction of this arrangement. This statement, we think, must be erroneous, as we cannot possibly imagine to what objection the plan can be open on the part of the gas-manufacturers. The reason why it is not used probably is that it is patented and too expensive.

This apartment, rendered so gorgeous and intricate by its contents, is amply lighted from the front by large arched windows, each consisting of a single plate, and together occupying the entire end of the room, which latter is of the full size of the building with the exception of a small office comprised in the rear.

The third floor is filled with elegant porcelain from Sevres, Dresden, and elsewhere; tortoise shell, enameled, and inlaid furniture, and dressing tables, &c., &c..

We saw here a gentleman's dressing case in rose-wood, the price of which was a thousand dollars. It contained a basin, ewer, candle-sticks, &c., of solid silver; even the

frame of the mirror, we remember, was of silver.

The Sevres porcelain vases were extremely beautiful, and the tête-a-tête tea sets, for a hundred dollars, or a little less, painted with rustic scenes, were really exquisite.

There were cups and saucers of Dresden porcelain at a hundred dollars a dozen, and dinner sets at three thousand dollars! The statuettes of this material were remarkably beautiful; we remember one of a female figure, in an exquisitely cut, lace dress, the price of which was about a hundred dollars; also five most ingenious and pretty conceptions, emblematic of the five Senses.

The beautiful *gueridons* painted with flowers, and the exquisite toilet-tables, enameled, and inlaid with gold and shell, and garnished with their elaborately carved ivory brushes, we have only time to give a hurried parting glance.

This story was lighted in the same manner by plate-glass, arched windows, but of smaller size, and the articles were all arranged in cases upon white-oak tables, in the same elegant style, as in the rooms beneath. Suffice it to say of the interior, that from roof to basement floor, throughout every section of the building, convenience, elegance, taste, and security, were combined in a degree as nearly perfect, as, with our present lights, we think attainable.

But this establishment would be unjustly dealt with, did we not speak, with emphatic commendation, of the external of the edifice, in which it is embodied—a structure worthy in all respects of its artistic and precious contents, and, we verily believe, unsurpassed in classic beauty by any business edifice in the world. It is of white marble, and of that richly ornamental composite order, denominated the modern Italian. The whole façade is pierced, with perfect symmetry, by fine arched windows, so large, upon the first and second floors, and filled with such clear glass, as to leave the whole interior of those stories exposed to view from the opposite side of Broadway. A richly carved entablature projects over the first story, and from thence to the top appear elaborate sculptures in bas-relief, of different designs upon each story. The fifth story is surmounted by an ornate cornice, on each end of which is a lion's head, and in the centre are two Cupids flying to each other, and clasping a wreath of flowers, all in bas-relief on marble. This stately edifice is imposingly crowned, in the centre of this cornice, by two huge and majestic lions couchant, facing opposite points of the compass.

Of the history of the Jeweler's Art in this country we know next to nothing. Indeed we question if materials exist, at least in any

accessible shape, for framing such a history, even were it desirable. But we suspect that whatever is of interest in relation to this subject belongs almost exclusively to our own day. And yet, after reading what we have just described, one might think he was reading of an Art, which an antiquity of many centuries in any one country could alone have brought to such a state of perfection. Of M'r TIFFANY and his co-partners we know personally no more than does any one of our readers, but it is no difficult matter for us or any other person to infer that the mastermind, whosesoever it is, of such an Institution as that we have described, must be one of high refinement, and of great artistic judgment and taste, as well as possessing commercial talents of the highest and most comprehensive character, to conduct securely and profitably a business so vast, and so responsible as that involved in such an establishment as we have set forth. The word Institution we used advisedly, for well is that title merited. The edifice itself is a veritable Temple of Beauty, and its exquisitely fashioned and embellished contents are fitting offerings for the shrine of such a Temple. And who shall say how far and wide a taste and a love for Beauty and Grace may not spread over the land from such a centre?

Our reader may perhaps count it strange, if not objectionable, that we have surrendered so much space and devoted so much time to the history and description of a single Art with its belongings, and that Art one which is commonly associated with ideas of luxury, not to say vice, rather than with those of utility and virtue.

In reply to such notions we have to say that Beauty is one of the highest and most universal elements of the Creation, and the love of Beauty is one of the most indestructible and craving appetencies of that Human Soul, which is Creation's vice-gerent.

If therefore all our faculties were designed by their Giver, to be unfolded, so far as our means and opportunities permit—and what enlarged mind can question this?—then to cultivate the love and capacity for the Beautiful, and to create, to the measure of our ability, what corresponds thereto, may be pronounced an obligation instead of a malfeasance. At the very least such cultivation and creation are our undeniable right.

There are many reasons in favor of attention to this point.

Thus: Beauty is the natural and equal companion of Goodness and Truth. Tennyson indeed, in one of his superb poems, named, we think, the "Palace of Art," intimates that these associates may be separated, and that Beauty may be exclusively cherished and enjoyed, to the neglect of the other

two. We think he exaggerates not a little; at any rate that severance, even though temporary, is never so complete as he represents.

We think that these three elementary principles go normally together, and that the lover of the Beautiful is more likely than others to love the Good and the True also. If then moral elevation, intellectual refinement and the humanizing of the manners are all favored by the taste for Beauty, the inducements are certainly very strong for the culture of such taste.

That the Beautiful is a source of pure and harmless pleasure is another cogent plea in its behalf. Men must amuse themselves, as well as labor. Neither bodily nor mental soundness can be otherwise conserved; and hardly anything more deeply concerns the general welfare than the character of the amusements men seek. We trust the day may not be very distant when mankind may find some wiser and less harmful respite and refreshment from grave and toilful occupations, than "sporting," (so-called) in most of its branches, or in gratifying their appetites by intemperance in its many kinds. Why, with our better moral lights, should we not at least do so, in one point, by surrounding the whole details of even ordinary life with a halo of Beauty? That the results of so doing would, in all ways, be purifying and elevating, we cannot doubt for a moment.

If, in the foregoing remarks, the reader may at first sight think we have spoken too gravely, considering the nature of our theme, we beg of him to listen a few moments longer.

The Jeweler's Art, like those of the Painter, Sculptor, &c., is simply a special mode of producing certain forms of Beauty. That is, following the example of the Great Proto-Artist, he imprints upon certain materials those forms, which gratify a certain taste, the germs of which are implanted in every human mind. The materials he employs, *i.e.* the gems and the precious metals, are, in themselves, rare and beautiful—the products of that Principle of Beauty, which is a constituent of the Divine Mind.

But, unlike the flower, the sea-shell, the rainbow, and myriads of things beside, which are met with in nature perfected, and unapproachable by human endeavor, the above materials are found in the rough, but are capable of being wrought, by man's skill, into shapes far more beautiful than their primitive. Does it not seem as if these two classes of creations were expressly designed to incite men to the culture of the Beautiful? —the *incomplete* furnishing materials for man's experimentation—the *perfected* serving

as exemplars? The idea seems to us by no means absurd.

If then we penetrate deeper than the mere surface of things, it will appear that the Art of the Jeweler, like the other Fine Arts, and, in short, like all modes of creating Beauty, whether in form or tint, corresponds to one of the profoundest facts in the universe, and ministers to one of the most ineradicable wants of the human mind. It is as truly a part of the mechanism of this material life, as the vocation of the farmer, who feeds us, or the house-builder, who constructs a shelter from the elements.

We will not here enter upon the *abuses* of ornamentation. They are but too common, and are familiar to all. They make however nothing against the Beauty-producing Arts, but are merely instances of that human frailty, and unsustained equilibrium, which are as old as History—which are indeed the distinguishing characteristic of Man. As Pope expresses it in his immortal Essay upon that frail creation, we may as well expect

“eternal springs, and cloudless skies,
As Men for ever temperate, calm and wise.”

OLNOOG

[POSTSCRIPT.—Since all of the foregoing pages have been in type we have read for the first time in the *North British Review* for November, 1852, an article, entitled the "History of the Diamond," in which the difficulties in the way of the "Koh-i-noor's" claim are set forth in much the same manner as we have done. The writer quotes a theory of Professor James Tennant, Mineralogist to the Queen, according to which the "Emperor of Russia's Diamond" and the "Koh-i-noor" are both slices of the "Great Mogul's;" this theory however the writer in the *North British* does not himself support, nor do we think it entitled to the least consideration, especially as it appears that Professor Tennant's information in regard to the Russian Diamond is as limited as our own. Notwithstanding the many forcible facts stated in the article, the author does not seem to have had the independence to deduce his own conclusions in regard to the "Mogul Diamond" and the "Koh-i-noor," unless, in the face of his own arguments, he includes himself among the "believers" referred to in the following sentence: "'The Great Mogul Diamond' passed through various hands, and after many changes in weight and in form is believed to be represented by the Great Exhibition Diamond belonging to Her Majesty." This however is scarcely probable, after his stating that "the historical evidence" and "the physical testimony of weight and form"—"two sources of evidence," he says, "which, taken separately, we consider irresistible, and which, when combined, amount to demonstration"—are both *against* conclusions involved in such a "belief!"

The name of D'r Horace Wilson is given in this article as the writer of the account of the "Koh-i-noor," published in the "Official Catalogue of the Great Exhibition," and the author of this article itself is stated by the *Eclectic Magazine*, for January, 1853, (in which it is republished,) to be Sir David Brewster, which latter statement we do not hesitate to discredit. Although the article is deeply interesting, and irreproachable in its style, it does not exhibit such results of personal scientific research as we presume would characterize whatever would be deemed worthy of publication by so eminent a philosopher.]

OF NOSE

